The Development of Further Education in Newport 1841-1958

Thesis

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The Development of Further Education in Newport

1841 - 1958

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Abstract

This thesis traces the development of the main-stream of Further Education in Newport from the commencement of the Mechanics' Institute in 1841 to the opening of the Newport and Monmouthshire College of Technology in 1958. When this joint college was opened, all advanced work was transferred from the Newport College of Further Education, so that 1958 is a natural break in the history of Further Education in the town.

The only other major work on Further Education confined to Newport itself is "The Development of Technical Education in Newport, 1841-1904" by John Brace (M.Ed. Thesis, University of Wales, 1977). The present thesis examines this period in much greater depth, corrects several errors which have occurred in Brace's work, and extends the study until 1958.

Thomas Evans, in his thesis, "The Mechanics' Institutes of South Wales" (Ph.D. Thesis, University of Sheffield, 1965) does consider the Mechanics' Institute in Newport, but not to the depth of this work, nor does he trace its history over the full period of its existence. He has also drawn conclusions which this work has been unable to substantiate.

The aim of this thesis is to find out how and why the development took place in the way it did, to record the highlights and investigate the failures. It also seeks to compare and contrast this development with the national picture wherever possible, and with the patterns in other towns. In some of these towns, some of the same size as Newport, or even smaller, the Mechanics' Institutes and Technical Institutes developed into universities or polytechnics. This thesis will try to show why Newport does not have such an institute.

The first chapter follows the history of the Mechanics' Institute from its start in May 1841 to 1870 when the Newport Free Library came into existence. It is the story of rises and falls in activity, following the pattern of Mechanics' Institutes in general.

The second chapter deals with the School of Art and Science under the Free Library Committee from 1870 to 1891, considering the steady advance of

the educational work.

1891 saw Further Education come more directly under the control of the Town Council. The third chapter deals with the work of the Newport Technical Institute. This work was hindered by personality clashes, political differences, and lack of proper accommodation until 1910 when a new building was provided at Clarence Place. The formal division of the work into Art and Technical sections and the development of the latter under Mr. J. Stewart are also considered.

Chapter four covers the period from 1910 to 1933. The rapid expansion of work in the new building until the outbreak of war, the brief principalship of Dr. R. Holland, his work and plans, and the period under Mr. G. Bennett, when circumstances caused a stagnation in the work of Further Education in the town, are all considered in this chapter.

The fifth chapter traces the beginning of the revival of the work under Mr. A. Webb, followed by the consolidation under the firm leadership of Mr. F.W.R. Harrison until 1958.

The final short chapter reviews the whole period and draws conclusions from the material presented.

Introduction

The first half of the nineteenth century saw great changes taking place in Great Britain in industry, society, education, in fact in almost every aspect of life. The industrial revolution was sweeping the country bringing on the one hand increasing wealth to the minority and, on the other, squalor and deprivation to many of those who moved from country to town to the new industries.

With the industrial revolution, or perhaps part of it, came the development of alternative means of transport and an efficient transport system, the development of metallurgy, engineering, chemistry, new machines and new sources of power. As a result of these developments the gentry became wealthier and had increased leisure time, while at the same time a new middle class emerged without the traditional background of the gentry.

The favourite motto of this new middle class was "Self-help" and this was a doctrine which, Trevelyan claims, "left behind many of the weaker and less fortunate" (1) It was also the motto which encouraged Owen to start the Co-operative movement and was the watchword of many of those involved in the development and running of the Mechanics' Institutes.

As the century moved to its middle period the upper and middle classes became more religious in habits than their predecessors of the eighteenth century. Their religious piety was often expressed in the form of humanitarian activities which increased as Victoria's reign progressed. Among these activities were the passing of the Factories Act of 1833 and the Repeal of the Corn Laws in 1847, Owen's Co-operative movement, and an increased interest in educating the working class.

At the beginning of the nineteenth century there was very little primary education available for the working class apart from the dames schools. The children of the gentry were educated by private tutors. There were, however, three types of secondary school. There were the fashionable public schools such as Eton and Harrow where the boys were given a purely classical

education; then there were the private Academies, (which did not survive long into the century) where the course of studies was of a more scientific and modern nature, and finally there were the old endowed Grammar Schools.

In 1833 the Educational Committee of the Privy Council was set up with a Permanent Secretary. It was responsible for the inspection of state-aided Schools and the distribution of £20,000 per year for school buildings. In addition to the few state-aided schools there were the British Schools, established by the Non-conformist groups, and the National Schools set up by the Church of England. Both of these were funded by private subscription and both were run on a monitorial system. Pauline Gregg claims that as a result few pupils left with a competent knowledge of reading or writing. (2)

In Wales the British and National Schools had little impact. By 1843 there were only two British Schools in North Wales and very few in South Wales (3) Most of these schools were for boys; girls were even less well catered for.

The lot of the working man of the time was far from easy. The hours were long and the pay poor. In 1833 a provincial artisan earned about 22 shillings per week, the town labourer 14 shillings per week and the agricultural labourer some 10 shillings and 6 pence per week. (4) The agricultural worker in Monmouthshire was slightly better off in 1840, earning 13 shillings and 6 pence per week. (5) In 1850 the worker in engineering, iron and steel, building, pottery, and glass worked on average about 60 hours per week (6) and the agricultural worker probably more. In addition he probably lived in over-crowded, unsanitory housing, for it was not until 1848 that the first Public Health Act was passed and this was not properly enforced for another twenty years.

It is against this background that the origins of Further Education in Newport must be seen.

Newport, the major town of the County of Gwent, lately Monmouthshire, with a population of some 120,000 straddles the mouth of the river Usk.

According to some local historians Newport can trace its history back to about 1500 B.C. and could well have been the seat of government, Pendan (7), of that period.

If this is so, it had certainly lost its importance by the time of the Romans, who set up the headquarters of the Second Legion (Legio II Augusta) at Caerleon, some four miles inland from Newport.

The Normans, realising the strategic importance of Newport, built a castle in about 1126 (8) to guard the ford over the Usk (perhaps to keep the Welsh in Wales). The town became the New Port on the Usk, instead of Caerleon, and flourished until 1402 when it was attacked and burnt by Owen Glyndwr (9) A steady decline followed, so that by 1801 Newport was no more than a large village with a population of about 1100 (10). However, the gradual growth of the Monmouthshire Canal and Tramroad network through Pontypool, Cwmbran and Crumlin and the final extension of the canal in 1804 (11) together with the rapid growth of the coal trade, with much being exported through Newport (75,000 tons in 1805) (12) resulted in a major growth in the town and a six-fold increase in population by 1831. (Map 1 shows Newport in 1827). Industry began to move to the town - the Newport Gas Company built its works at Crindau in 1825, the Uskside Engineering and Rivet Works opened in 1830 and the Dos Nail Works in 1835.

To aid navigation of the tidal waters of the Usk a lighthouse was built in 1821 (13) (which still stands and is now used as a private dwelling) and the steam age began for Newport with a regular steam packet service between Bristol and Newport. Another important development was the introduction in 1830 (14) of steam locomotives on the Newport Tramroads which carried coal to the riverside wharves. This meant an increase in the volume of coal that could be exported so it was decided to build a dock for the town. The first Newport Docks Act was passed in 1835 (15) and the Newport Old Dock was opened in 1842. Subsequent major dock developments took place in the 1870s and in the early years of this century. These dock facilities made Newport a major coal

exporter. (Appendix 11) In 1800 coal exports were a mere 32,000 tons; by 1900 they were over 4 million tons (16). The Alexandra Docks and Railway Company was exporting goods of many kinds to countries all over the world. In 1894 the gross volume of trade through the docks was 5.25 million tons. (16)

The railway reached Newport by 1850 (17), and thus with docks and railway Newport was able to develop its industrial potential. (Map 2 shows Newport in 1847). By 1891 Kelly's Directory of Monmouthshire reported that there were in Newport "numerous founderies, steam engine and boiler works, chain cable and nail factories, and shipbuilding establishments as well as dry docks for the repair of shipping, railway plant and railway wagons, chemical manures and agricultural implements are manufactured here. There are also glass works at Crindau, lime works at Lliswerry, flour mills, breweries and maltings; bricks are made in the neighbourhood" (18). The dock facilities by 1900 consisted of the Old Dock, the North Dock, the South Dock and four dry docks (18). (Map 3 shows Newport in 1891). Thus by the end of the nineteenth century Newport was a well established dock and industrial town of 67,270 inhabitants. (19) But it must also be noted that although Newport was about equal to Swansea and Sunderland in coal exports, Cardiff was exporting five times as much (18) - and had already outstripped Newport in most things.

The general pattern of the development of further education in England and Wales is difficult, perhaps impossible to trace. Cantor and Roberts are of the opinion that further education is rather like Topsy and "just growed" (20). "Nothing in Further Education is ever uniform" (21) states Bristow and this is as true of the development as of any other aspect of further education. In every town the pattern seems to have been different. A brief outline of the development in four towns other than Newport where that development has been traced is given later in order to contrast and compare with the development in Newport.

The first formal educational establishment in Newport was the British School for boys opened at Old Green in 1815 (22). A British School for girls

opened in 1833 in Llanarth Street, followed by the National Schools in Commercial Street in 1839 (23). Dos Nailworks School was founded by the owner, Mr. J.J. Cordes, in 1848 "to attract boys of ability to come to the works and also as a place of educational pioneering". This school, where the boys received instruction free of charge, continued until the end of the nineteenth century (24). There is no ancient Grammar School in Newport and the High Schools date only from 1897.

The Mechanics' Institute in Newport started in 1841. The general history of the Mechanics' Institute is well known. The movement started when Birkbeck began giving formal instruction to the mechanics who made his apparatus at Anderson's Institute in Glasgow, and gradually other operatives joined the classes. After his move to London in 1823, Birkbeck, together with Francis Place and Brougham founded the London Mechanics' Institute in 1824. This Institute attempted to combine self-government with the support of the wealthy stratum of society. This was the widely imitated model elsewhere.

The Mechanics' Institute movement swept the country so that by 1850 there were some 600 Institutes up and down the country. In Wales there was one in Swansea by 1826. In 1829 one was set up in Bridgend, in 1830 there was one in Dowlais and in 1839 one in Pontypool.

"Mechanic" did not mean primarily a machine operative. It never had a precise meaning in the context of Mechanics' Institutes, but it was generally understood to be a craftsman although the meaning was sometimes extended to cover all manual workers. Craftsmen in the mid-nineteenth century strove to better themselves and this, together with the financial support given by the well-to-do meant that Mechanics' Institutes became, generally, supporters of the existing social order. Certainly this was the case in Newport. Kelly (25) states that if the Mechanics' Institutes had not supported the status-quo they would not have been so widespread.

While they were flourishing in many parts of the country (Manchester had 1015 pupils in classes in 1839) (26), the movement in South Wales was one of fits and starts. The Institute at Swansea started in 1826, ran only for a year, was re-started in 1839, and finally closed in 1847. Cardiff Mechanics' Institute opened in 1841 and lasted until 1857. Some classes were held but these were not successful. Some Mechanics' Institutes had longer lives; Bridgend, opened in 1829 for just one year, started again in 1848 and went on until 1901; Llanelly had a Mechanics' Institute from 1840 to 1898, with classes held in the 1880s and 1890s; Neath Mechanics' Institute, 1843 to 1898, also had classes in the 1880s and 1890s, as well as in its earlier years. Several other Mechanics' Institutes were formed; some had a very brief existence such as Aberdare, 1848, while others became more like literary societies such as Brecon, 1841 to the 1870s.

The Mechanics' Institute at Newport, 1841 to 1870, compares very favourably with any in South Wales. The longer-lived Institutes were not transferred to Free Library Committees as was the Institute in Newport in 1870, so that it is fair only to make comparisons over the period from 1841 to 1870. During that period Newport Mechanics' Institute ran continuously, building up a considerable library which became the foundation of Newport Public Library. It is true that classes were not very frequent, but they were no more frequent in any of the other South Wales Institutes. Thomas Evans states in his thesis, "The Newport Mechanics' Institute .... has an unbroken record of successful educational work from the time of its foundation", (27) but this is very difficult to defend or substantiate on the evidence available. Again there appears to be very little to indicate that the statement, "It had been observed at Newport that, if value were given for money, in the form of really efficient class instruction, the working class was willing and able to pay for it", (28) is correct. The only really effective classes were held from 1865 to 1867 and there is nothing to indicate from which social classes the students came.

The towns of major importance nearest to Newport are Cardiff (some 12 miles distant) and Bristol (about 30 miles away). How did further education develop in those two cities?

In the early nineteenth century Bristol was already a town of major importance and had been for several hundreds of years. Cardiff, however, was not so important, but gradually grew in size and status during the century, drawing the population from the valleys to work in the many new industries and in commerce, until by the start of this century it was the undisputed Capital of Wales.

Bristol was, and is, a far bigger town than Newport. In Bristol further education can be traced back to 1823-24 with the founding of the Bristol Institution which was a Philosophical and Literary Society set up for the "diffusion of useful knowledge" with lectures, a museum and a reading room. (29) The Bristol Mechanics' Institute was formed in 1826 and in 1845 merged with the Bristol Athenaeum ("a middle class literary and philosophical society" (30) which had been formed in 1844. The Athenaeum had been set up with the help of gifts from W.D. Wills and other wealthy men. Classes were held and a reading room which took 60 papers and 23 magazines was opened. It went into decline in the 1860s and was finally closed in 1888 (31).

There were also in Bristol various learned societies, things which never existed in Newport except for the Newport Natural Science Society which seems to have been in existence for some years in the 1880s. A Library Society had been in existence since the late eighteenth century; a Naturalist Society was set up in 1862; a Statistical Society existed for a few years and various Scientific Societies were formed.

These Societies, together with the Mechanics' Institute and Athenaeum helped to provide the right climate for the growth of further education. Perhaps the major development and the real starting point was the opening of the Bristol Trade and Mining School in 1856 - this was a day science school and was a success, one of the few set up in the country that was successful. (32

This School became the Merchant Venturers' Technical College in 1894 and eventually the Bristol College of Commerce and Bristol Technical College. It was from these two colleges that Bristol College of Advanced Technology, later to become Bath University, and Bristol Polytechnic, were to develop.

While the Trade and Mining School was growing there was a move to start a University College in Bristol and Bristol University College was opened in 1875 (33).

Why was the development of further education so much more successful in Bristol than in Newport? There are several reasons. First, the city itself was more developed and larger than Newport. Secondly, there were more business men and industrialists in the Bristol area who were far more generous with financial aid than their lesser counterparts in the Newport area. Thirdly, the several learned societies, with the Athenaeum and Mechanics' Institute, prepared the ground for the middle and upper classes to back the Trade and Mining School and the more prestigious University College. Fourthly, at the turn of the century, Bristol Technical Instruction Committee was very generous in the money spent on Technical Education and on the Technical Institute (34). Newport, at that time, was very niggardly, with expenditure kept to the very minimum. *

In Cardiff, further education traces its origins to the founding of the Cardiff Mechanics' Institute in 1841 (35). Its aims were much the same as the Institute in Newport which was founded in the same year. It became the Cardiff Athenaeum and Mechanics' Institute in 1848 and eventually closed in 1856 (according to D.A. Eastwood, 1857 according to Thomas Evans). A few classes were held but these were not successful and by 1848 there were only two mechanics among the members (36). A Working Men's Institute was formed in

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* All the information on further education in Bristol was taken from "Adult Education in Bristol during the Nineteenth Century", by H.J. Price, an unpublished M.A. thesis, University of Bristol.

1857 but folded the same year (37).

In 1860 Cardiff adopted the Free Library Act and the first free library in the city opened in 1863. In 1866 Science and Art classes were run by Mr. James Bush who also taught at Newport for three or four years. These classes expanded so that by 1868 there was an Art Night School, and in 1876 the work further expanded to set up out-posts in Roath and Canton (38). In 1867 the Cardiff Naturalist Society was set up and at that time there were six other learned societies in the city. The Cambridge University Extension Scheme was a success in Cardiff mainly because the Naturalist Society was so flourishing (39).

By 1892-93 the Technical School (as the Science and Art classes had now become) had four departments with 1895 students. The Department of Pure and Applied Science had 17 classes with 729 students, the Art Department had 12 classes with 388 students, the Commercial Department had 9 classes with 715 students and the Women's Technical Department had 9 classes with 272 students (40). In 1916 the new Technical College building was opened; "the new Technical College, opened on 13th March, 1916, was obviously meant to serve the whole of South Wales" (41).

The work continued to expand so that by 1925 there were 12 departments. This college became the Welsh College of Advanced Technology, with the lower level work transferred to Llandaff Technical College. It is now the University of Wales Institute of Science and Technology.

During the final quarter of the nineteenth century there was a move in Wales to set up its own University. This culminated in the opening of the University College in Cardiff in 1883. Cardiff, by then, had established itself as the "Capital" of the Principality, and as such was able to set up colleges for all areas of academic and non-academic work within its boundaries.

At the turn of the century Cardiff was developing rapidly and has continued to do so. Newport has developed much more slowly as a town and as an industrial and commercial area. This is one reason why further and higher

education has expanded and developed so much in Cardiff. Another reason is the learned societies that existed in Cardiff but were lacking in Newport. Perhaps one of the major reasons is the actual geographical position in which Newport is situated. For long years the debate has gone on - "Are Monmouthshire and Newport part of England or Wales?" Although most people in the county and town would say Wales, the education authorities have appeared to believe that the Welsh border stops at St. Mellons and consequently any major development of Welsh further education has been concentrated on the Cardiff side of this imaginary line. There is no doubt that Cardiff and Glamorgan have had the lion's share of the further and higher education cake in Wales, and Newport has suffered as a consequence. *

Can comparisons be made between Newport and any other towns in the United Kingdom? Two areas where detailed studies have been made are Huddersfield and Carlisle.

Huddersfield, (population, 131,000 in 1971) (42), in industrial Yorkshire, had its own Mechanics' Institute 1841, again the same year as Newport Mechanics' Institute was founded. It flourished until 1884 when it became Huddersfield Technical School. Between 1851 and 1884 average membership was 1,260 and there were over 1,000 in classes every year during this period (43). This is a very marked contrast to what happened in Newport, Bristol, Cardiff and South Wales generally and is probably due to the emphasis that was put on elementary education, viz reading and writing.

Huddersfield Mechanics' Institute was also fortunate to have many "dedicated patrons" (44) as well as the support of Prince Albert and the Prime Minister at the time. This meant that the Institute was never in debt

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* All the information on further education in Cardiff was taken from "The Full Man", the History of Adult Education in Cardiff, 1860-1960", by David Arnold Eastwood, an unpublished M.Ed. thesis University College, Cardiff.

and in 1883, £15,000 was available to build the new Technical School (45). Again this is in contrast to Newport where the shortage of money was always a constraining factor.

"Lectures were consciously never used as a substitute for class teaching as they were so often in many Mechanics' Institutes" (46), and the main emphasis was educating adults. By 1883 Huddersfield had its own purpose built building, staffed by full-time teachers. The realisation that elementary education for the mechanics was the key to a successful Mechanics' Institute and the action Huddersfield took to give this elementary education resulted in Huddersfield Mechanics' Institute receiving Government grants as early as 1848 (47).

Another reason why the Mechanics' Institute at Huddersfield flourished was that in the surrounding villages there were fourteen smaller Mechanics' Institutes, as well as eight even smaller institutes. In Huddersfield itself there was a Female Educational Institute founded in 1846. Most of these institutes operated successfully for many years, and some were even able to erect their own buildings. It seems that in the Huddersfield area there was a determination to make Mechanics' Institutes successful, and clearly they were.

The Technical School, the successor to the Mechanics' Institute, became a Regional College in 1956 and a Polytechnic in 1970.

There are several reasons why Huddersfield was so much more successful than Newport during the early development of further education. First, the wealthy patrons in Huddersfield gave generously so that effort was concentrated on education, and not diverted onto fund-raising. Secondly, there seems to have been an enthusiasm among the general public in Huddersfield for the Mechanics' Institute which was lacking in Newport. Thirdly, and the first two are, perhaps, because of this, the emphasis was on classes, not intellectual or humourous lectures, classes which the illiterate working men could see would benefit him. In Newport there was a real desire to start

classes, but there was a lack of realisation that it was the elementary classes which were needed, not classes in French or Phrenology. [*]

In Carlisle, (population 71,000 in 1971) (48) the early pattern of further education is very different to that in Huddersfield. The Mechanics' Institute in Carlisle was founded in 1824 with a committee made up entirely of working men (49). Classes were formed immediately in Greek, Hebrew, Latin, English Grammar, Mathematics and Natural Philosophy, but were discontinued in 1828 because of lack of students (50). By 1832 the Institute had practically ceased to exist due to financial difficulties, but, in 1834, it was restarted. It continued to have financial problems until it finally closed in 1890 when it was handed over to the Corporation as the nucleus of a Free Library.

Classes were run for a few years after the new start and in 1854 a School of Art was set up. In addition to this work the Working Men's Reading Rooms ran classes in reading, writing and English grammar from 1841, intermittently, until the end of the century (51). Several local firms had their own libraries and reading rooms, and one or two ran classes for employees The YMCA and the Temperance Society both ran classes for young men from 1859 for a period of years.

All Technical, Art and Cultural activities were brought together under one roof in 1893 (52), but in 1896 Art and Science classes were separated, and have remained so ever since. There are now in Carlisle a College of Art and a Technical College and this probably meets the full requirements of further education of a town of just over 70,000 people.

There appears never to have been any very generous patrons of further education in Carlisle, nor any major disagreement between the Corporation and those running further education. In fact, the development from the

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[*] All the information on further education in Huddersfield was taken from "Adult Education in Huddersfield and District, 1851-1884" by J.P. Hemming, an unpublished M.Ed. Thesis, University of Manchester.

School of Art (1854) to the present colleges seems to have followed a very smooth course. *

In Newport the development of further education is similar in some respects to what happened elsewhere and yet differs in other respects. The development from 1841 to 1914 has been relatively easy to trace as, not only are there full minutes for most Committees involved in the running of further education, but the Press was very concerned with what was happening. The activities of the Mechanics' Institute and succeeding Institutes were generally fully reported and disagreements and controversies were brought into the open. From 1914, when the Press was far more concerned with the happenings of the First World War, the Press has been less interested in the details of what is happening in further education. In addition, from about that time, minutes of Committee meetings have been much more concise and sometimes even vague, so that it is often easier to find details of events which occurred 130 years ago than it is to find out what happened 40 or 50 years ago.

* All the information on further education in Carlisle was taken from "The History of Further Education in Carlisle in the Nineteenth Century", by D. Leigh, an unpublished M.Ed. thesis, University of Newcastle-upon-Tyne.

Chapter 1

The Newport Athenaeum and Mechanics' Institute

1840 - 1869

Further education in Newport can be traced back to 1841 with the founding of the Newport Mechanics' Institute. The link is not very strong, but the Institute is worth investigating to see what its objectives were, whether any were achieved, and why, basically, it failed.

Newport of 1840 was a town of some 13,000 inhabitants (1). It had recently suffered the Chartist riots with the subsequent trial and deportation of John Frost and his fellow-leaders to Australia. The Charter, formulated by the London Working Men's Association, contained six main points, namely universal adult manhood sufferage, annual Parliaments, voting by secret ballot, equal electoral districts, the abolition of the property qualification for members of Parliament and the payment of members of Parliament. John Frost a draper, was a prominent Radical in the Reform movement, and had been a magistrate and Justice of the Peace as well as Mayor of Newport (2). His radical views led to his election as a delegate to the Chartism Convention and on his return he became the acknowledged leader of the Chartists in Monmouthshire. It was under his leadership that the Chartists converged on Newport from the valleys of the county with the consequent storming of the Westgate Hotel, the reading of the Riot Act and the use of troops to suppress the riot with bloody results. The man responsible for putting down the riot was the Mayor of Newport at the time, Thomas Phillips, who was knighted for this action for which he is primarily remembered.

He did far more than this and was, in fact, a remarkable humane man. Born in Ynysgarth, Breconshire, in 1801 he was a solicitor in Newport, who moved his practice to London after the Chartist riots and became a Freeman of London, a Queen's Councillor, and a governor of Kings College, London. He set up a colliery school at Courtybella in 1839 with a lending library and a new church. He started a co-operative store linked with the colliery and promoted a sick fund for his workers. He was a champion of education in Wales (3). He tried to persuade other mine owners to build and support schools. He spent a considerable amount of his own time and money on the

support of children's education and the building of schools. When the Commission of enquiry on education in Wales reported that the poor state of education in the Principality was caused by the speaking of Welsh and universal immorality among the working class it was Sir Thomas Phillips who refuted this in his book "Wales, the Language, Social Condition, Moral Character and Religious Opinions of the People" (4)

Newport was, then, in 1840 a divided town. The majority of the population of the town was very poor indeed and death by starvation was not unknown. The thinking section of the poor supported Frost and his aims whereas the majority of the handful of very wealthy gentry and the growing middle class, ranging from doctors and merchants down to publicans and shop assistants, supported Phillips and the status-quo.

It is against this background that the start of the Mechanics' Institute in Newport must be set. The Mechanics' Institute movement had been growing and spreading since the early 1820s. It had reached Pontypool by February. 1840 (5) at the latest and there were reports of lectures at Gloucester and at Coleford Mechanics' Institutes by October 1840 (6). The Monmouth Mechanics' Institute had been in existence for at least a year (October. 1840) (7) and there had been moves to start one in Abergavenny in the winter of 1839 (8).

Samuel Smiles in "Self Help" describes the origins of a typical Mechanics' Institute in Northern England with two or three young working men meeting to help each other study and from this developed their Institute (9). The Mechanics' Institute in Newport did not start in this way, for the initial move came from the upper and middle classes as a method of assisting the "mechanics" to better themselves.

The first indication of an interest in Mechanics' Institutes in Newport appeared in the "Monmouthshire Merlin" of August 1st, 1840. A long poem by BARTLETT, dated "July 1840" clearly written to stimulate interest in Newport. extolled the virtues of such institutes. It is worth quoting in full as it

is typical of the literary style and taste of the area and time.

"The Mechanics' Institution

O Institute! with kindliest influence fraught!
At thy approach the demon Ignorance flees;
His deadly train of evils sink to naught,
All - save their name - in dark oblivion lies;
While knowledge, with her saving pinions spread,
Soars from the awful gloom by Ignorance made.

Peace to the shades of Newton, Bacon, Watt,
Locke, Davy, Arkwright, Priestley, and a host
Of men illustrious, whose labours wrought
A nation's honour and a nation's boast;
Whose name shall last as long as time shall be,
Graved on the pillars of eternity!

Emulate their example, ye who bask
In fortune's sun! stretch forth the mighty hand
T'improve the human race; the pleasing task
Will be its own reward. Throughout the land
Mechanics' Institutions soon shall spread,
And with unwavering aim their serving influence shed!

May every hamlet in our native land
Shine forth, with Institutions such as this;
May we join heart to heart, and hand in hand,
To lay up stores for future human bliss!
May great success our willing efforts crown,
To chain the iron tyrant Ignorance down.

The headstrong passions of the minds of men,
They'll greatly tend to soften and subdue -
Lure the mechanic from his "deadly Gin",

But oh! ye rich! the "moving power's" with you;

Draw, draw your purse-strings, sieze the golden time,

To rescue men from mis'ry and from crime!

What nobler action then to raise mankind

From grovelling pursuits to wisdom's ways?

To raise to energy the human mind?

Such acts are far beyond the loudest praise,

"Eternal honours wait on glorious deeds,

And though a late, a sure reward succeeds!"" (10)

This poetic fervour seems to have had little effect, for not until December was there any further mention of the Mechanics' Institute. W.M. Townsend, in a very long letter, (letters to the press in 1840 often ran to two full columns of very small print) deplored the apathy in Newport towards a Mechanics' Institute. He pointed out that Pontypool (considerably smaller than Newport) had one. Education was available for children, but there was nothing for adults and something was required for the "working mechanic". He felt that a Mechanics' Institute should seek to unite employee and employer in common interests, generally enlightening and elevating the working man. The benefits to the working man would be numerous - it would wean him from "the debasing habits of intoxication and the sottish pipe", making him "a reformed character, a better husband, a better father and a better - because a more useful - member of society". People would raise difficulties - no lecturers, no place to meet, no patronage, no funds, ridicule from the working people. Mr. Townsend considered each point in turn and showed how they could be overcome. For example, he stated that Newport could provide lecturers in (i) Mechanics (ii) Principles of architecture - building and masonary (iii) perspective and other drawing (iv) Natural philosophy (v) Chemistry (vi) Natural history (vii) Anatomical structure (viii) Geology (ix) Mineralogy. He went on to suggest that there should be a preliminary public meeting in the Justice Room (11).

In the same issue an article headed "Newport Mechanics' Institute" stated that the Institute was on the point of being formed. Its aims were "to encourage mechanical genius and at the same time to promote the welfare and happiness of the operative classes of society". It would afford the mechanic "an opportunity of improving himself in the first principles of his art". This would be achieved by reading scientific works, hearing the lectures of educated men and "by witnessing various pleasing and instructive experiments and illustrations". There was a feeling among some that these Institutes would not produce much improvement among the mechanics - and that "a little learning is a dangerous thing". However, "a party of respectable young men, desirous of establishing so great a desideratum in this town, held a preliminary meeting on Saturday evening last". A deputation had seen the Mayor to obtain permission to hold a public meeting and they had been promised help (11).

Things continued to move slowly, for it was not until 13th March, 1841 that the "Merlin" reported, "A requisition, numerously and very respectably signed, was presented to the Mayor of Newport, on Thursday last, soliciting his sanction to a public meeting and permission to hold the same at the Town Hall, for the purpose of adopting means of establishing a Mechanics' Institution". The Mayor agreed and the meeting was to be held in the next few days (12).

Despite this, it was not until 17th April that it was announced that the public meeting would be held on the following Tuesday, at the Police Court (13).

The meeting was at last held on 20th April. The "Merlin" reported it at length. There were about 100 people present and a great deal of enthusiasm was shown. The first resolution approved by the meeting was proposed by Rev. David ap Rhys Stephens (who had helped to form the Swansea Mechanics' Institute) and seconded by Mr. Samuel Jones, Town Councillor:- "That, impressed with a conviction that a taste for the useful and sound departments of Literature and Science, in preference to a morbid love for the amusing

and frivolous, is now manifested by the public mind of this town, and assured that the establishment of a Mechanics' Institute at Newport would materially ameliorate the condition of the working classes, and encourage Mechanical Genius; - It is resolved by this meeting that a Mechanics' Institute be established in this town".

The second resolution, proposed by Mr. James Mullock, artist, and seconded by Mr. Ebenezer Rogers, was:- "That no religious or political party difference be introduced into this Institution: and that the House of Tredegar, the Lord Lieutenant, the Members for the County and for the Boroughs, and those gentlemen (whether resident or non-resident in Newport) whose interests are in any manner connected therewith, be respectfully requested to patronise and support the Institution".

The third resolution, proposed by Mr. Phillips of the Council Office and seconded by Mr. Slade of the Monmouth and Glamorgan Bank, was:- "That a Committee be formed to meet and frame all requisite Rules and Regulations, to consist of the following twelve persons, who are to have the power to increase their numbers:

Rev. David ap Rhys Stephens

Mr. T. Hartney - Cordwainer

Rev. Thomas Gillman

Mr. Lloyd - foreman at a factory

Mr. Edward Dowling

Mr. W. Jones - plasterer, Stow

Mr. S. Jones, Town Councillor

Mr. Henry Hopkins - compositor

Mr. Ebenezer Rogers

Mr. W. Vaughan - watchmaker

Rev. Wm. Thomas

Mr. Ed. Newman - cabinet-maker

seven of whom to form a Quorum. In all increase of Committee, at least

one-half the members to be taken from Working Mechanics who may join this Institute".

The fourth resolution, proposed by Mr. W.M. Townsend, and seconded by Mr. W. Christopher of the Merlin Establishment was: "That as well as the Scientific of this borough, as also the Lecturers of the Institutions of Pontypool, Chepstow, etc. and particularly those Engineers, Mineralogists, and Geologists, and those whose experience in chemistry, comparative anatomy, animate and inanimate nature, architecture, literature, and the fine arts, and, though last, not least, the practical adaption of knowledge of the Arts and Sciences, in the better instruction of the Mechanic and Operative, as applied in their various trades and callings, and moral and intellectual improvement, are earnestly requested to co-operate in Lecturing and Instruction, according as their convenience may permit". (14)

The Committee met for the first time on Wednesday, 5th May, when it was decided to increase the committee to 24. A sub-committee was set up to find suitable rooms to rent for up to £30 per year (15). Despite an offer of rooms in Commercial Buildings by Mr. Crossfield, the Institute made use of rooms in Great Dock Street,

Rules and regulations were formulated (unfortunately there does not appear to be a copy in existence), but the first Annual report does give some information. The object of the Institute was "the diffusion of knowledge amongst its members by means of a Library, Reading Room, Classes, Public Lectures, etc." (16) It was to be run by a President, Vice-President, Honorary Secretary (or Secretaries), Honorary Librarian(s) and 18 directors, half of whom were to be "mechanics". (A definition of a "mechanic" does not appear). Admission to all activities was by ticket which cost two shillings per quarter. Initially this was for men only, but in 1843 women were admitted for four shillings per annum and boys under 15 for six shillings per annum. Classes could be formed on the recommendation of any member who had seven others seconding the proposal. The teacher of each class was to arrange the internal

government of the class, but the committee could demand a report.

The first year's programme was varied and extensive. Fourteen lectures were given (see appendix 1) and at least seven different classes were held.

Rev. D.R. Stephen's lecture on "Ancient Philosophy" was the first event. The "Merlin", while agreeing that it was a good lecture, was critical of the audience. "The rev. gentleman, during the delivery of his lecture, was frequently and loudly applauded by a most crowded auditory .... Before we conclude, we cannot avoid observing that demonstrations of applause upon occasions similar to the present .... are, from the very nature of the subject, peculiarly inappropriate". (17)

It was proposed to set up classes in Welsh, arithmetic, geography, geology and drawing, as teachers were available. If reports are accurate all of these were run for all or part of the year.

Other aspects of the Institute flourished. The Reading Room was well attended (18). (The Reading Room was one of the more successful aspects of the Institute throughout its existence). A book was provided in the Reading Room for members of the Institute, who were out of work, in which they could put their names and profession. Prospective employers could select men from the list (there is no indication how long this scheme lasted).

Although the Institute was being supported by the middle-class in the town, there was very little support from the gentry of the area; in fact only the Lord Lieutenant of the County, James Blewitt the local member of Parliament, and Sir Digby Mackworth had come forward. (19)

Not only were the middle-class men supporting the Institute, The "Merlin" reports a large number of ladies present at Mr. Pryce's lecture on 13th July, on "Druidical Temples and other Stone Erections of the Ancient Britons", which was "one of the most interesting lectures we have ever heard upon that or any other subject". (20)

An article in the "Merlin" on 31st July, 1841, reports that the Institute was making favourable progress. Several lectures had been given, "but,

perhaps, the most important step taken by the committee is the formation of classes, where a regular and consecutive course of instruction will be undertaken by competent teachers, members of the Institute .... 4 classes have already been formed for instruction .... viz. the Welsh language, Geology and Mining, Geography, and Penmanship". It was hoped to announce the formation of other classes. "This is beginning at the right end, and proves that the committee are fulfilling the intent and purpose of such institutions - the improvement of the moral and intellectual conditions of the working classes". The article continues by deploring the lack of interest by "those whose wealth is, in a great measure, derived from the labouring classes". The influential stratum of society had, with a few exceptions, kept aloof from the Institute. (21)

To stimulate interest the committee arranged a Public Exhibition of Pictures, other works of Art, subjects of Natural History, Specimens in Geology and Mineralogy, and Articles of Local Manufacture. It ran from 7th September to 5th October, and included works by Rubens, Vandyke, Titian, and Berghein in the 150 paintings. An added attraction was the band of the 11th Regiment, but again there was a decided lack of interest among the more influential classes.

Despite this lack of interest the Institute seemed to be progressing satisfactorily until one of the periodic wrangles arose which seemed to bedevil this Institute. These internal disputes could not have done the Institute any good since the offended parties invariably used the Press as a medium for "airing" as much "dirty linen" as possible.

This particular dispute arose about a lecture by Mr. Jefferson on "Physiology and Phenology" which the secretaries had arranged to take place on 19th October. The arrangement had been carried out without the approval of the committee, some of whom objected, and these, according to Mr. H.W. Moreton, in a letter to the "Merlin", had threatened to resign. He stated that the committee had been "continually threatened by the secretaries by

their resignation, unless the committee accede to their views on any subject." (22)

The secretaries immediately replied via the "Merlin" - with acrimony (23). This bad feeling was not to the taste of all for a letter from "PACIFICATOR", headed "PEACE! PEACE! PEACE!" urged both sides to forgive and forget, (24) but H.W. Moreton had to have a last bitter word (25). The main sufferer in this dispute must have been the Institute.

The largest audience of the year was on 28th December for Rev. James Francis' lecture on "Popular Superstitions". This caused the "Merlin" to report, "We think it will soon be obvious, that a larger room for lectures is necessary, and that more rooms for classes - the most useful department of the Institute - must be obtained; but to meet this increase of capabilities for instruction, there must be a corresponding increase of funds, and to realise this, every lover of his species should now come forward, and aid the young institution by membership, subscriptions and donations" (26)

Classes were still being formed. The "Merlin", 19th March 1842: "We are pleased that we can this week announce the formation of a music class in this well organised institution, which will be conducted on such new and attractive principles, as will render the acquirement of a knowledge of the rudiments of this delightful science, easy and interesting. This arrangement must offer a great inducement to persons of a refined taste, and even to those who now do themselves the injustice, perhaps of believing that they "are not born to echo Music's tones", to enter the Institute at once, thus cheaply to acquire the knowledge of a Science so justly and almost universally admired". (27) This was hardly the type of advertisement to appeal to the mechanic and operative classes of society, or "to encourage mechanical genius", but perhaps it was not designed to do either.

The first anniversary of the Institute was celebrated with a soirée - an event which seems to have become traditional. The band of the 11th Regiment played and there was a string of speeches on "The Evils of Ignorance",

"The Diffusion of Knowledge", "The Universality of Poetry", and others of a more general nature. The Annual report was read and it indicated that classes had been held in Writing, Drawing, Geography, Arithmetic, Grammar, and Mathematics. (In addition there was a class in French for which the teacher was paid). Although these classes were free, it must be remembered that those attending did have to be members of the Institute and this cost eight shillings per year - surely a sum far beyond the means of most of the inhabitants of the town. (28)

It is clear that, even after only a year, the Institute was not attracting members from all strata of society. It was far too expensive for the labouring man, and the content of the lectures and even the classes was not suitable. The organisers did not appear to realise this. For example, a letter to the "Merlin", 2nd September, 1842, states that while Cornwall's Circus had been in town drunkenness had fallen. The Circus was about to leave, so why did people not come to the Mechanics' Institute? The letter goes on to extol the virtues of the Institute and states that it is suitable for all classes of society. (29)

Although this was obviously not the case, the Mechanics' Institute was having an impact on some social areas of the town. "An Englishman", writing to the "Merlin", appealed on behalf of member of the Institute for an easing of the lot of Shopkeepers' Assistants. "They are made wholesale drudges - slaves more hardly treated than many of the "poor, poor blacks" ...." (30)

The committee of the Institute presented a memorial to the shopkeepers urging them to close their shops earlier so that their assistants could attend the Institute. (31)

A draper's assistant, Mr. D. Weston Evans, in a well argued letter, stated that the assistants would like shops to close at 8.00 p.m. in the winter so that they could attend the Mechanics' Institute. The shopkeepers objections were that the assistants would not go to the Institute but to the pot-houses, and that "early closing will not work". However, in Cardiff

shops had been closing at 8.00 p.m. in the winter for several years without any adverse effect on trade. (32)

The argument continued with further letters in favour of the idea, but urging caution. However "Ionae", in an intemperate letter, stated that the drapers' assistants were a lot of rogues who would just take advantage of early closing, and had no intention of attending the Institute. (33) One of the teachers at the Institute replied that ten or twelve such assistants attended classes regularly and were "steady and attentive to a degree".

Despite the formation of a debating class, a lack of teachers meant that some classes could not continue. The "Merlin" reported, "There are gentlemen enough in Newport well calculated to teach the various classes with ease and ability; and we hope they will not debar the rising generation, ... from sharing a portion of that which they themselves enjoy in such rich abundance." The article continued that there was"a fear that the spirit which hailed the formation of the Newport Mechanics' Institute has grown apathetic towards its outward progress. This is a criminal indulgence of lassitude in the use of those means with which a kind Providence has gifted many of our fellows". (34)

The second annual report stated that although classes in Drawing and French had been run, as well as a Discussion Group, classes in Writing, Arithmetic, Grammar, Geography, and Mathematics were not possible because there was no one willing to teach them. At the end of the second year the Institute had debts of £33. (35)

The Committee felt that more local men should be giving lectures. The "Merlin" commented, "It is somewhat surprising that in a district containing so many gentlemen with great abilities and much leisure, and a Mechanics' Institute with so large a number of members, so few lecturers should be found anxious to disseminate their knowledge among the less cultivated portion of society". (36)

As the autumn programme began, the "Merlin" reported that the drapers

in the town were closing early and urged other tradesmen to do likewise. After some pressure from the Press the grocers agreed, too. Mr. E. Thomas, commenting in a letter to the "Merlin", urged the assistants to join the Mechanics' Institute. One of the benefits of the Institute had been the move to get all the shops in Newport to shut by 8.00 p.m., but Mr. Thomas expressed concern that the assistants would spend all their free time (sic) in public houses, and "even resorting to the gambling table". (37)

As from October 1843 there are in existence minutes of the committee meetings which supplement reports in the Press. At the committee meeting in October 1843 it was resolved to set up a class in Grammar and to combine the classes in Writing and Arithmetic, (38) and after much deliberation a class was formed for "Hullak's" system of singing. This class attracted 40 members who paid two shillings and six pence each. (39)

There were signs of a decline and the committee was aware of it. The third annual report noted that, although there had been one or two points of encouragement during the year, there were "many circumstances eminently calculated to depress their hopes". The highlights of the year had been the admission of women to the Institute and generous gifts of money and books. Although the Institute was still in debt it was not as much as it had been. As far as classes were concerned, "your committee cannot but express regret at the inefficiency of this division of the Institute during the year". Only four classes had been held - Grammar, Drawing, Discussion, and Music. "Your committee are unable to account for the comparative indifference to this highly important department, manifested by the members, and are extremely sorry that though persons capable of teaching various branches of art and science have become members of the Institute, they cannot be prevailed upon to assist in the conveying to the uncultured mind the rudiments of the knowledge which they (the more learned) possess". (40)

The annual soirée was held in April, 1844 and this led a member to suggest that a quarterly Musical soirée would "be one of the surest modes

of raising the Institute to eminence". (41) One wonders whatever had become of the original aims of the Institute - perhaps this member did not know what they were.

There was a state of economic depression in the town at this time, and the decline in the Institute quickened, although there was a well patronised outing by boat to Weston-super-Mare in July, 1844.

The "Merlin", seeking to revive interest, printed an article on the situation in October. "It is a painful thing to allude to the decline of any public institution which has been, and should continue to be, of infinite benefit; and lamentable is the fact, that those for whose intellectual advancement and social advantage an Institute was founded in this town, have been found wanting in the co-operation necessary for its existence." Is this statement correct? It is true that a decline had set in, but it is difficult to lay the blame on the mechanics and lower classes of society. The cost of classes and lectures was prohibitive and the whole ethos of the Institute must have been forbidding in the extreme to the majority of the population.

The article continues "It will be remembered with what unwearied zeal and perseverance several public-spirited and philanthropic individuals undertook the establishment of the Newport Mechanics' Institute; nor will it be forgotten with what liberal spirit many of our wealthy residents extended their support to a project so well calculated to advance the mental character of this rising town." Again this statement is open to debate. If it is true, why was the Institute in debt, and why was it necessary for statements such as those which appeared in the "Merlin" of 31st July 1841 and 5th July 1843, (previously quoted), deploring the lack of support from "our wealthy residents"?

"The Institute was formed upon a basis the most advisedly considered and maturely approved; and its classes opened with full members, eager, under the guidance of teachers of well-known abilities, to obtain the cheap but invaluable knowledge held out to them. Lectures were delivered; and crowds

attended the novelty. Fresh numbers were thereby daily enrolled; and all went flourishingly on. This promising opening, however, cherished hopes which were not to be realised, for though two sessions of the Institute were nobly supported, yet a visible falling off ensued, and has gradually continued to the present time. The state of the Institute now reflects discredit either on those who ought to support it by their abilities - actively exercised as at the commencement - and by pecuniary support; or it owes its decadence to mis-management in some department of its governance. The first part of the proposition, we regret to believe, is incontrovertibly true; while the latter part is asserted by some to be undeniable. Meanwhile the number of members is dwindling away to but a tithe of what it should be; the funds have become circumscribed in the same ratio; general difficulties are daily of greater magnitude; the promised periodical lectures have, indeed, been "few and VERY far between!"; the list of patrons is fearfully abridged; and unless active measures are promptly and urgently carried out, the fate of the Institute may be safely predicted. An abrupt termination of so valuable a nursery, would be severely felt. Other towns, of lesser importance than ours, would derisively point at "Young Liverpool" and laugh us to scorn for the apathy we had so unfortunately evinced. But this catastrophe, we hope will yet be averted. There are, it is understood, active exertions AT LAST resorted to, which may possibly redeem Newport from the dishonour of permitting its Mechanics' Institute to decline into extinction. A committee are making appeals to the liberal-minded inhabitants of this town and vicinage, for assistance in this extremity; and we do hope, for the credit of Newport, the appeal will be bountifully met, that the Institute may again raise its head and assume that position of usefulness it is so well calculated to take, in this rapidly increasing emporium of South Wales". (42)

The double implication of lack of support and mis-management led to a string of letters to the "Merlin", but was either implication correct? Certainly there was a lack of support, there can be no doubt of that - numbers

had fallen. Mis-management is too strong a word; perhaps a certain amount of apathy can be detected in the committee minutes, but the basic trouble was that the Institute had been founded on too narrow a base, as were most other such Institutes, and the committee followed the pattern of programmes of other Institutes, programmes which just did not appeal to the general mass of the population.

One of the Honorary Secretaries (probably T. Inglis) sprang to the defence of the Institute. There had been a falling off in numbers, but it had been confined to the last three quarters, and "Mechanics' Institutes are not .... supported by journeyman mechanics, but by gentlemen of liberal and intellectual minds, and by intelligent tradesmen - those men who attend such places are foremen, or superior men of their class. In Newport .... there are very few of this class; therefore it is in vain to look for an increase from that quarter". He suggested that it would have to be gentlemen and traders who would set the Institute on its feet again and he urged the people who were complaining to attend the general meeting the following week. (43)

A letter from "A Member of the Institute" suggested that members were withdrawing because of the badly conducted half-yearly elections. He claimed that even boys of ten could propose committee members and anyone of fifteen or over could vote. The result was that there was a small group deciding who would and who would not be elected - the more established members did not like this and were withdrawing. (44)

"Conservator" agreed and laid the blame on a new ruling clique. (45) This brought a bitter reply from T. Inglis, but "A Juvenile member of the Newport Mechanics' Institute" replied more constructively. According to him no one under fifteen could speak at general meetings, no one under twenty could serve on the committee, and at the last Annual General Meeting only three people under twenty-two were present. He urged the older members to do their best to help the committee overcome the present difficulties. (46)

The controversy continued with further letters until finally one from

"A well-wisher to the Newport Mechanics' Institute" urged the warring parties to forget their differences and unite for the benefit of the Institute. (47)

The wild accusations and the replies find no mention in the committee minutes. The committee continued to meet twice a month and continued to suggest the formation of classes. It was proposed to start a Phonographic class, (48) and classes in Welsh, Instrumental Music, Reading and Discussion. (49) Only those in Music and Welsh appear to have run.

Despite the letters and feelings aroused, apathy continued. The Annual General Meeting was attended by only nine people. It was resolved that the secretaries should continue in office until a General Meeting on 25th April 1845 and that they should consider the distribution of the property of the Institute - was this a suggestion that the Institute should be wound up? (50) However, considerably more people attended the meeting on 25th April and the Institute survived. (51)

1845-46 was a year of little activity apart from the 13 lectures held. Classes were proposed in French and Discussion (52) and later one in Arithmetic, (53) but no further mention is made of them so one is led to presume that they did not, in fact, run. A concert was held in April, 1846 to raise money for the Institute, and in the Annual Report the committee was able to state that the Institute was out of debt. Membership had increased over the year, but there is no mention of classes. (54)

The following session saw one of the periodic upsurges in the Institute. Membership had increased to 369 and classes were held in Arithmetic, Writing, Music and French, "but", the report continues, "classes have been very ineffective from a want of members". (54) During the year 15 lectures had been held and the committee trusted that they "had elevated the character of the Institute". (55) The committee was endeavouring to build up the library and whenever funds were available (and sometimes, one gets the impression, when they were not) money was being allocated for the purchase of books (Appendix 2).

It was during this year, too, that the name was changed. On 15th January, 1847, Rev. T.L. Bright proposed at the committee meeting, "That the Society shall be called the Newport Athenaeum and Mechanics' Institute". (56) This was formally adopted at a general meeting on 20th March with 27 in favour and 12 against. Why was the name changed and did it have any effect on the Institute? There is no direct reference to the motives of the people concerned, but perhaps the words "Mechanics' Institute" by themselves sounded altogether too plebian and the addition of "Athenaeum" gave the Institute much more aesthetic character. Certainly the change did nothing to improve its image to the working man.

The committee minutes at this time suggest that the Institute was being managed quite efficiently, except for classes. Gas lighting for the Institute' rooms was investigated and fitted; a lecture sub-committee was set up to arrange lectures and classes. The lecture programme went well, but no classes ran - was it again a question of a lack of teachers? The committee did not seem able to deal with this situation, although it was well aware of the need for classes.

Apart from the lack of classes the year 1847-48 seems to have been a good one for the Institute. A large number of lectures was held, the annual question of early closing came up again with a petition signed by 600 inhabitants of the town, and in general the committee was quite pleased with itself. "They (the committee) cannot refrain from congratulating the members .... upon the high position the Institution is necessarily taking among similar ones in the kingdom". (57) The "Merlin" was not always satisfied, however. It comments on Mr. Buck's four lectures, "These lectures, in which Mr. Buck adopted a discursive style, to us somewhat objectionable, were rather numerously attended, and proved, we believe, generally entertaining". (58)

The upward trend continued in 1848-49. A successful trip was undertaken to Abercarn and Twm Barlwm (a local beauty spot) in May 1848 and a Glee Concert

was held in July to raise funds - unfortunately at a loss of £4. (59) The winter programme was an ambitious one of 16 lectures and the "Merlin" commented after one, "The spirited conduct of the committee of the Athenaeum in their judicious catering for public gratification, merits extended patronage". (60) However, after Mr. Clarke's second lecture on "Some of the subordinate Characters of Shakespeare", when there were not many present the "Merlin" wrote "We trust the future efforts of the committee to procure the service of first-rate lecturers will receive more general patronage". (61) Indeed, this lack of support was one of the causes of the Institute running into financial difficulties in later years and helped to bring about its demise.

Classes were run in Phonography, Arithmetic and French. The Phonography class, teacher Mr. J.C. Skinner, was run with considerable success, but the Arithmetic class, teacher Mr. Phillips, was not a success. The French class, teacher M. Simmonet, was run by a private agreement. (62)

The Institute was creating a favourable impression outside the town of Newport itself. A letter from the Dean of Llandaff, with a gift of £5 which was used for books for the library, spoke of Mechanics' Institutes "affording an essential supplement in behalf of adults to the efforts for general juvenile education which so creditably distinguish our age". (63)

The Institute continued to flourish in almost every aspect except classes, and in 1849-50 no classes at all were held. Membership increased (it is reported, for example, that all the members of the Newport Police Force were members of the Institute), books were being bought regularly, and the Reading Room and Library Rules were made more formal. (Appendix 3) Many people were offering to lecture and at almost every committee meeting minutes read of offers of lectures being turned down. Charles Dickens was asked to lecture but declined. (He never lectured in Newport under the auspices of the Athenaeum, but did so many years later at the Victoria Rooms soon after they had been completed.) Top class lecturers were being engaged at considerable

expense. Mr. Warren's four lectures on 'The Cotton Trade' cost 21 guineas (sic). Many of the lectures ran at a loss, but occasionally a handsome profit was made. Mrs. G.L. Balfour's two lectures in November, 1849 resulted in a profit of £14 for the Institute. The annual soirée was held in April, 1850, the charges being 1/6 for members, 3 shillings for member and lady, non-members 2/6. The Annual General Meeting was important because of the proposal to appoint a paid librarian "as soon as possible and at the lowest cost consistent with efficiency". (64) As a result, Mr. James F. Thomas was appointed at £10 per year (65) which was raised to 12 guineas in December.

During 1850 the first attempt was made to obtain a site for a building for the Institute. A sub-committee was set up and an offer of a piece of ground was made by the Tredegar Wharf Company whose agent Mr. Batchelor (the President of the Institute 1850-51?) promised to give £50 if the proposed building met with his approval. (66) This came to nothing as did so many other attempts.

It was proposed to hold an Eisteddfod the following year and planning started in August, 1850. It was held on 11th March, 1851 and appears to have been a successful venture. At least twenty prizes were awarded and some 700 people attended. (67)

A discouraging note is struck by the committee minute of 5/11/50 when it was decided to discontinue the "Practical Mechanics Journal". This seems a very odd decision for a so-called Mechanics' Institute, and indicates the direction in which the Institute was moving. Again it is discouraging to find that the only class to be held during the year was the one for Essay and Discussion. This class was formed in December, 1850 with Mr. R.J. Cathcart as President (Appendix 4 gives the rules of this class). Average attendance was about 18, but it is difficult to imagine many of the working-class attending discussions on subjects such as "Is the Sources of Language Human or Divine?", or "Poetry, a necessary Element of Civilisation?"

It is clear that there was some dissent in the town about the direction

in which the Institute was moving, for the "Merlin" reported on 15/2/51 of moves to form an Institute of Working Men. "A circular has been distributed, addressed to"the working men of Newport", calling upon them to save their expenses of unnecessary "smoking and drinking", and form themselves under a managing committee of their own class, into a Mechanics' Institute, where they may find useful instruction in art, science, and literature, blended for their particular good, in lieu of the artificial "comforts" now purchased by them at a dearer cost in another kind of institution. But although the motive for this address may be a worthy one, it should not be forgotten that the doors of a valuable institution are already open to welcome the working man, - the Newport Athenaeum and Mechanics' Institute, where for less than two pence per week, some of the best periodicals of the day are found on the table of the reading room, with the daily and weekly newspapers, and serials on the arts and sciences; while a very large and valuable library is nightly open for the use of the members, and instructive lectures are delivered at stated intervals. Surely, if the working men of Newport require cheap instruction, rational amusement, or useful occupation of leisure hours, they need not go to the expense of procuring another institution, while one formed for themselves particularly, and especially suited to their requirements is already provided". (68)

One wonders how the "Merlin" could make such statements as the final sentence when the only class in existence was the Discussion class as described above, and the emphasis of the Athenaeum had moved from the practical to activities of a more cultural nature. (Appendix 1 gives a list of lectures held each year)

A week later moves were set afoot to start a new Institute at Pillgwenlly, a thriving area near the docks. A public meeting was held with the Mayor in the chair. A committee was set up with Mr. W.C. Webb as President, three Vice-Presidents, two secretaries, two auditors, two treasurers and 24 committee members. During discussion it was stated that the Newport Athenaeum would

shortly be moving from the Town Hall and hoped to have a purpose-built building in Dock Street - in fact an architect had been engaged to draw up plans. It was suggested that when the new building was erected the two Institutes should unit. (69)

During the following week another meeting was held to set up the Newport Working Men's Institute. The main discussion at this meeting was whether the committee should be all working men or one quarter middle class. Mr. N. Hewertson (who later had a considerable influence on further education in Newport) felt it would be wrong to have a rule stating that all the committee should be exclusively working-class. Again, a general impression is formed that the Working Men's Institute would be for men with a trade and not what would be generally known today as working men. (70)

The Working Men's Institute was formed on 18th March, 1851, when it was stated that there was "no desire to injure the Athenaeum, but only to collect and provide literary advantages for working men who do not join the society already existing". (71)

However, the Athenaeum did not take kindly to these new Institutes. At the Annual General Meeting it was "resolved that this meeting cannot but regret that it should have been thought necessary to form other institutions in this town professing to have the same ends and aims in view as the Newport Athenaeum and Mechanics' Institute which is open to persons of both sexes and of every class without distinction, more particularly as the united effort of all will be required to enable the committee to secure the increased accommodation contemplated in the proposed new building". (72)

Thus we have the ridiculous situation of three institutes with basically the same aims within a circle of radius of not much more than one mile, competing with each other. It is not surprising that two of them closed within three years - in fact it is surprising that the Working Men's Institute lasted that long.

The question of the new building caused much effort to be expended,

largely to no avail. A public meeting was held early in March, 1851, when two alternatives were put to the meeting. A building could be erected at the corner of Ruperra Street, facing Dock Street, or Hope Chapel - opposite the Westgate Hotel, in the rear of Commercial Street - could be converted for use. It was decided to set up a committee. (73) A long series of committee meetings was held to discuss the possible sites. Another committee was set up to consider the best method of financing the building work. (74) Later in the year the Parrott Inn came onto the market. The committee looked at it and asked a surveyor to inspect it and estimate the cost of its conversion. (75) It was proposed to rent and convert the Parrott; the General Committee agreed to this provided the rent did not exceed £80 per annum. Unfortunately the owners declined to let the property.

After much discussion, with the matter being referred back from the General Committee to the Building Committee several times, a suggestion was made that a large building should be erected and the Athenaeum should have part of it. The project would be financed by a Joint Stock Company. The Committee felt it could not go ahead with this - in its opinion the Athenaeum needed a building exclusively for its own use. The Building Committee had three objectives (a) to find a suitable site, (b) to decide how much money was required and (c) to decide on methods of raising the money. It was not easy to find a site - what was required was a plot somewhere in Commercial Street or High Street, but the only plot available was in Great Dock Street (at the upper side of Hope New Chapel). This site belonged to the Tredegar Wharf Company and it had been offered at a rent of four pence per square yard. It was not the best site, but it was the only one available and there were some advantages, namely that there was no building already on the site, and also it was nearer Pillgwenlly than either Commercial Street or High Street.

The proposed building would be 50 feet by 60 feet, comprising a large lecture hall with an ante-room, a library, a reading room, a committee room and classrooms. It would cost between £1400 and £1500.

The money would be raised by

(a) donations. Those who gave £5 or more would be given life membership;

(b) an issue of shares of £1 each. These could be paid for by monthly installments of two shillings and six pence, and would pay interest of five per cent per annum;

(c) payment of annual subscriptions in advance;

(d) several entertainments and a bazaar;

(e) a mortgage (but only if absolutely necessary)

The Building Committee urged that all efforts should be made to raise the money. (76)

A special General Meeting approved these plans on 26th August, 1851; an architect had been appointed by 3rd September and plans for the building were available by 16th September - and that was as far as the scheme progressed. Nothing is recorded as to why the scheme was dropped; we must presume that the money was not forthcoming.

A suggestion was made that the Athenaeum and the Working Men's Institute should amalgamate and a delegation waited upon the committee of the Working Men's Institute. (77) The Working Men rejected the overture by a considerable majority at a general meeting on 22nd July. (78) This was not surprising as the Working Men's Institute seemed to be progressing favourably at that time. Initially 300 tickets for membership had been sold, rooms had been rented, and periodicals had been purchased. (79) The programme was different from that of the Athenaeum. Initially it was mainly discussions. In May, 1851, two hundred members were present for a discussion, "Has the introduction of machinery benefited or injured the working class?" A discussion later the same month considered the fascinating subject, "Whether Barclay and Perkins' draymen were justified in their recent conduct towards Baron Haynan, the Austrian woman-flogger". (Appendix 5 gives as much of the programme of the Working Men's Institute as has been traced). The Working Men's Institute

continued until March, 1854 when it closed and members were urged to join the Athenaeum. It had been slowly declining after the initial enthusiasm had waned and its demise became inevitable.

The Athenaeum continued during 1851-52 in its normal fashion, with lectures, library and reading room, but no classes. A notable lecture during the year was on "Female Costume" - which included a discussion on Bloomerism by Mrs. T.C. Foster, when she herself appeared in modified Bloomer attire! (80) Even the lectures were not well attended. The "Merlin" reports after one meeting, that it had been "a most pleasing entertainment for the public .... which was very numerously and respectably attended, a state of things upon which we regret we have not more frequently been able to congratulate the committee". (81) The situation was not helped by the failure of a local bank with the subsequent loss of funds of the Athenaeum. Also the library was not operating as efficiently as it should have been. A sub-committee reported that there had been slackness on the part of the librarian in opening the library, and suggested that there should be an honorary librarian present whenever it was open. (82) Later a new librarian was appointed at twelve guineas a year.

In July it was decided to link the Athenaeum with the Royal Society of Arts which meant, according to the "Merlin", that first class lecturers could be obtained at a moderate cost. (83) This appears to have been the only advantage gained by such a link.

The annual round of talks on a new building started again in July, 1852 when a sub-committee recommended the purchase and conversion of Hope Chapel. Despite a general meeting when the committee were instructed to proceed with the purchase nothing happened. By November, 1853 the Building sub-committee reported on various sites and suggested Mr. Batchelor's plot between Commercial Street and the canal. It was agreed to go ahead with fund raising, but when in June the following year the committee asked for extra land and Mr. Batchelor asked for an extra £5 a year rent, this project fell through.

Later the same month a site became available in Park Place and the whole routine was entered into once again. A special meeting in March, 1855 decided that this site was the best then available and approved plans to build at a cost of £2,500. A thousand circulars were sent out, soliciting donations for the building fund but as only ten donations were received the scheme was dropped. A crisis over the building arose in March, 1857 when the Town Council gave the Athenaeum notice to quit the rooms being used at the Council Chambers. It seems to have been resolved for it was not until October of that year that new accommodation in the form of the Diocesan Board School in Dock Street became available. When the Athenaeum finally moved in August, 1858 the great debate over accommodation was finally settled.

1852-1853 was a quiet year, again with no classes running. A notice was put up in the reading room about classes and it was proposed to set up a class for recitation and readings from the British Classics, but nothing came of this suggestion. The main activity during the year was the Eisteddfod which was held in September, 1852.

The following year was another inconspicuous one. It is true that a Discussion class was formed and some 20 lectures and entertainments held, but it is clear that the Athenaeum was not fulfilling its original aims. Although the committee stated in the Annual report that "the Society is progressing, during the year there has been a considerable increase in numbers", they were also aware of the main shortcomings of the Athenaeum. "Very little progress has been made in the formation of classes. Your committee are sorry to say that they have only succeeded in establishing one, for discussion. This class meets once a week. Your Committee feel convinced that classes ought to form a principal element in such an Institution as this, and deplore the want of interest manifested with regard to them". (84) The general apathy is indicated by the fact that only 18 members were present at this Annual meeting, out of a total membership of 500.

The Newport Working Men's Institute was absorbed into the Athenaeum at

this time, but the only effect of this was that the Athenaeum took more newspapers in the reading room. (85) There certainly was no revitalisation of interest in classes as a result.

There was a falling off in interest in lectures in 1854-55. The "Star of Gwent" (a new paper of Liberal inclination, compared to the Conservative leanings of the "Monmouthshire Merlin") stated that "unless the lectures are better attended they cannot be given". (86) On Rev. W. Aitcheson's lecture it reported, "The lecture was listened to with deep attention and was appreciated by the rather select audience. Why is it that members of the Institute did not muster in large numbers and thus reward Mr. Aitcheson for the trouble he was at?" (87) The committee, too, was not happy with the situation, "It would have been a source of satisfaction to your committee to be able to report that class instruction had formed a more prominent feature of the year's proceedings." (88)

1855-56 is notable mainly for another campaign for early closing, and the formation of a Working Men's Institute at Pillgwenlly. A letter to the "Star" from W.A. Dixon, one of the Secretaries of the Athenaeum urged that shops be closed early enough for shop assistants to attend Athenaeum lectures. The audiences at that time were made up of "two classes of people, those who were entirely independent of business and the steady mechanic". "Where were the shop assistants?", Mr. Dixon asked and he suggested that they were chained to their shops. Early closing was not unreasonable demand. (89) However it was a considerable time before half day closing and early closing was introduced in Newport.

The formation of the Working Men's Institute at Pillgwenlly in January, 1856 was another attempt to run something for the classes of society other than the upper and middle classes. (90) Although it ran until the end of 1860 it did not succeed in meeting its objectives because it followed basically the same pattern of events as the Athenaeum and the ill-fated Newport Working Men's Institute. A reading room was opened on 1st January, 1856 and various

lectures were held. Unfortunately, as with so many of these activities in Victorian days, controversy and ill-feeling attended it even from its inception. For example, there was a dispute about who actually founded it. A letter from "A Pill Man" objected to Rev. J.T. Wrenford's claim that he was the originator of the Institute. (91) Such bad feeling could not have helped the infant Institute.

The standard programme of lectures and soirées to raise funds was undertaken. At the end of the first year a larger reading room was acquired in Bolt Street, and the "Star" commented that it really was Working Men's Institute as the quarterly price of one shilling indicated. At the first Annual meeting Rev. J.T. Wrenford emphasised that the working men were lacking in basic education and stated that the committee was about to form evening classes for the purpose of giving instruction in various branches of education. Later classes were run for a short period in reading, writing, arithmetic and French. Perhaps if such classes could have continued an impact could have been made on the working men of the area. However it was not to be, and basically the blame, to some extent, must be placed on the organisers of the Institute. They realised the importance of the working class. For example, Rev. J. Harding stated at the first Annual meeting that "working men are the most important class in society" and the Institute had to make them realise this. (92) This the organisers failed to do, as they failed to spur the middle and upper classes of Newport society to action to help.

While the Institute at Pillgwenlly seemed to be enjoying a flourishing beginning, the Athenaeum was being subjected to examination and criticism by the Press. A letter from "An Interested Member" to the "Star" stated that the shortcomings of the Athenaeum were not due to a lack of appreciation of the members but due to the everyday running of the Athenaeum by the committee. The low attendances at lectures were due to the high prices - if these were reduced more members would be enccuraged to attend. Other Mechanics' Institutes had done this with great success. (93)

The "Star" returned to the same point the following year when reporting a lecture by Sir Thomas Phillips. "It has often been our lot to complain of the want of support accorded to this Institute; but we are bound to say, in justice to the public, that those who have the direction of the Mechanics' Institute must not be surprised to find, as on the above occasion, an almost total absence of that very class for whose benefit it was designed, if they persist in charging the enormous price of one shilling for a lecture delivered gratuitously by a gentleman with a special view to the benefit of the class who were thus virtually excluded." (94)

The "Merlin" also had advice to offer. In a leading article headed "How may Mechanics' Institutions be made more useful?" it stated that the Mechanics' Institutes had not failed - the class for which they had primarily been designed had failed to make use of them. Some had used them and had benefited, but it was necessary to persuade more people to attend the various activities. Admittedly there were some who could not afford the subscriptions and entrance fees, but the "Merlin" believed this applied to very few!

The article continued, "Lectures are of great utility, in stimulating those who have not evidenced studious habits to read, whilst musical entertainments occasionally given, have an admirable effect in softening the manners and reaching the heart. But amidst all these various means of education, the classes, in our opinion, stand first .... We would like to see, in every Mechanics' Institution, a class for those who cannot read at all, and another for those who cannot write, and so on, in every department in which teachers could be obtained, and learners willing to attend. Thus would the original desire of such establishments be fully carried out, and the effect produced would be immense.

We have an exceedingly well-managed Mechanics' Institution in Newport, the committee and secretaries of which are practical and intelligent, and very zealous men, and it is certainly not their fault, if the establishment does not bring forth good fruit in abundance." (95)

Although this article contains some excellent ideas, it is clearly wrong when it discusses the ability of people to afford subscriptions and other payments necessary to attend classes and lectures. The real working man (the labourer, farmworker, miner and so on whom, in fact, one doubts if the "Merlin" took into consideration when talking of the working class) with his low wages, large family, and necessarily poor background just could not afford such luxuries as the Mechanics' Institute. The only way such men could have been brought in would have been to make classes free, but this would have meant far more generous financial support from the gentry of the area, and assistance from the Borough - an unthought of thing at that time.

Although in the Annual report for 1856-57 the committee claimed the year to have been a success, with the debt cleared, and an increase in membership to a record number, no classes were held. Several times in the report this fact is mentioned and the impression is given that there was a great desire to establish classes, but that there was little or no idea of how it should be done. Despite the committee's denial, there had been rumours during the year that the committee had "grown weary of well-doing" and was thinking of winding up the Institute. The "Star" urged the committee to think again and called on the general public to support this worthy Institute. (96) However, the rumour was without foundation as the "Star" was forced to concede the following week. (97)

The main outcome of the annual meeting in 1857 was the proposal "that in the opinion of this meeting the period has arrived in the history of the Newport Athenaeum when it requires the services of a paid secretary, and that it is very desirable that the attention of the committee should at once be given to the subject". (98) Mr. Matthew Johns was appointed within the week at a salary of £20 per annum. (99)

This was an important step and together with the acquisition of the Dock Street School led to the most active era of the Athenaeum (It also meant that the Committee minutes were now written in immaculate copper-plate and

not the previous hasty, often illegible scrawl.)

It was at this time that the Athenaeum was asked to leave the Town Hall and ill-feeling arose. It appears some of this was generated by the fact that the Mayor had not been elected as President of the Athenaeum, as was the usual practice. Instead Sir Thomas Phillips was elected. Sir Thomas, who had been Mayor of Newport at the time of the Chartist riots, and was knighted for his handling of the affair in the town, was a good friend of the Athenaeum and had many contacts with the Royal Society of Arts. However, there are indications that the rooms at the Town Hall were used until the Dock Street School was ready for the Athenaeum to occupy.

No classes were held during 1857-58 and not every one was satisfied with all the lectures and entertainments. A letter from "Le Noir" stated that the people of Newport were willing to support rubbish but not edifying lectures. In his opinion Miss Seyton's entertainment "Omnibus" had been a load of rubbish. "The larger portion of the audience left the room after the first part with ineffable disgust on their countenances". 256 people had been present and a profit of £2-17s-6d was made on the entertainment. He contrasts this with Prof. Partington's two lectures (on Chemistry?) a fortnight earlier when 21 and 19 (including both secretaries) were present. The Athenaeum could not afford to give instructive lectures to members at a loss of two shillings and six pence per head. (100)

At the Annual meeting Sir Thomas Phillips, the President, said that "he believed progress had been made during the past year." Despite an economic decline which continued well into 1859*, there had been an increase in membership and in the size of the library. The Diocesan Board School in Dock Street, which they were about to take over was adequate for all the uses of the Institute at that present time, and there was room for extension. At the end of the year there was the option of buying it for £150. Sir Thomas

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*There are several reports of the depression in Newport Docks, SG 22/1/59, 29/1/59, 5/2/59

pointed out the three main objects of Mechanics' Institutes, which were to provide a reading room and library, lectures, and classes. This latter, he regretted to say, did not exist in Newport. He stressed the importance of classes as a means of adult teaching and encouraging young people especially as the Society of Arts were setting examinations and the Universities had "thrown themselves open to the public". (101)

The Athenaeum eventually moved into its new premises on 4th August, 1858 and a determined effort was made to start classes. Classes were advertised in Freehand drawing, Italian, German, French, English composition and grammar, Arithmetic, Book-keeping, Essay and Discussion, and classes were formed in Freehand drawing, French and Arithmetic. The drawing class had 19 members with Mr. Mullock as teacher, the French class (divided into three sections) had 21 members under M. Simmonet, and the Arithmetic class with Mr. J.T. Turner as teacher, had 15 members. (102) It was stated in the annual report that the first two classes continued successfully throughout the year.

The following year attempts were made to start classes in French, Latin and Greek, Drawing, English Composition and Discussion. The only class formed was the Drawing class with eleven pupils, again taught by Mr. Mullock. One of the factors which may have influenced the numbers was the start of the very popular Volunteer Rifle Corps which attracted large numbers of young (and not so young) men into its ranks.

A letter from Z to the "Star", urged that a "free night school" should be established in Newport. In his opinion there were many adults in Newport who were yearning for knowledge, but there was no way of achieving this. (103) No action was taken as a result of this letter, but it really got to the root of the problem as far as classes were concerned. The working man just could not afford to join the Athenaeum and the associated classes which in most cases were not what he wanted anyway. Unfortunately no one with sufficient authority in the town seemed to realise this and take the appropriate action, but this was not a problem which was confined to Newport.

At the Annual General Meeting the Chairman reported that numbers were down, but more books had been borrowed and read. "He wished the classes could be better reported of, with the exception of the Drawing class, the report gave but a very poor account. He earnestly desired to see an alteration in that branch of the Institute, and hoped next year it would be reported upon in a more satisfactory manner". He noted that the Institute was linked with the Society of Arts - this must confer some privileges upon the Institute and these should be taken advantage of. (104) There was a feeling among certain committee members that the young men of the town did not appreciate the Athenaeum or its work.

At the start of the Winter session 1860-61 it was suggested that classes in French and Drawing should be formed for ladies, neither of which started. A French class was held for the men, but with small numbers. It was not a successful year for the Athenaeum. Numbers fell again; every lecture and entertainment, except one, ran at a loss (Appendix 1) and, in fact, attendances at these lectures were considerably less than at any previous period. (105)

At Pillgwenlly it was an equally unsuccessful year with the Working Men's Institute finally closing down in December, 1860. This was despite strenuous efforts by various individuals and groups to raise money and interest. The committee stated, "Although every effort has been made on their part to sustain the Institute, and not withstanding the kind liberality of several gentlemen of the neighbourhood who have contributed towards it, the working classes and others of the neighbourhood have not evinced that interest which might have been expected". (106) Again we note that the blame is being attributed to the working classes - the committee was unable to see that, in part, it had failed too.

The only bright spot in an otherwise bleak year was that the shops were now closing at 7.00 p.m. during the winter months and some offices were even closing on Saturday afternoons. It seems unlikely that this was due to any pressure from the Athenaeum but was because so many young men had joined the

Volunteers.

A letter from "Observer" gave what he thought were reasons why the Athenaeum had lost support. First, the concerts at the Town Hall had drawn members away, but this was the Athenaeum's own fault as it should make its own meetings more attractive. Secondly, the mania for outdoor amusements could have caused a drop, but "Observer" warns that no one should neglect the intellectual side of man. Thirdly the Rifle Corps movement (the Volunteers had been a big draw. The Athenaeum was not appreciated by the working class, because of a distrust on their part towards the middle and upper classes. To overcome this distrust and get the Athenaeum back to its former condition working men should be put on the committee. This had proved successful in other Institutes, he claimed. (107) This is an interesting suggestion for originally it was intended that half the committee should be working men. Whether this had been changed in the constitution of the Athenaeum, and if so when, it has not been possible to discover.

The committee, seeing the state of the Athenaeum, tried some new ideas to raise money during the summer and autumn. A boat trip was arranged to Ilfracombe. However, bad weather resulted in the ship stopping at Burnham-on-Sea, and the Athenaeum stopping payment to the owners of the "Ruby" for failing to fulfil their contract. They offered to pay £12-10s-0, half the amount demanded by the owners. Court action was threatened, but finally the company accepted the £12-10s-0.

Another fund-raising activity was a "Grand Fête Champêtre and Gala" which was held early in October 1861 on the Marshes (the site of the present Shaftesbury Park). It must first be stated about this Fête that it did raise £70-12s-0 for the Athenaeum. (108) However, not everyone was happy. The "Star of Gwent" felt that the arrangements were far from adequate. It estimated that about 5000 people were present, "but many of them undoubtedly had obtained admission by climbing the hedges and leaping the ditches, without paying any fee". (109) As for the Fête itself, the Brass Band competition did

not take place as no bands entered; the course for the boat racing was so long and twisting that the spectators could see very little of the races; the balloon failed to arrive (due to difficulties on the railways!) - even if it had arrived there was not enough gas (26,000 cubic feet) to fill it. (110 (This led the Athenaeum to sue the Gas Company for not providing enough gas to inflate the balloon. However it was settled out of court, the Gas Company paying £15 and £2 costs). The fireworks and the sports were a success and most people seemed to enjoy the fête.

The "Merlin" in an article headed "Newport Athenaeum and Mechanics' Institute. The Grand Fête on the Marshes" wrote, "In various towns throughout the kingdom, the complaint has, from time to time, been heard, that the promoters of the mechanics' institutes have not been rewarded with the measure of sympathy and support which it might have been supposed the importance of the object sought to be accomplished would have ensured, and that they have signally failed to secure, except in a very limited degree, the co-operation of that class for whose requirements their efforts were intended more especially to provide. That these complaints are by no means groundless is unquestionable; and that it should be the case is a matter for deep regret. What an impartial inquiry might show to be the cause of this apathy and lack of interest in respect to useful and praiseworthy institutions - whether a fair and candid investigation would reveal some defect in their mode of working or management, sufficiently grave to account for the evil, and whether it would lead to the conclusion that the very scant support accorded to mechanics' institutes is attributable to a want of appreciation on the part of a very large majority of the public of the benefits derivable therefrom - it is somewhat foreign to our present purpose to determine. The remark was simply made to remind the friends of the Newport Athenaeum that they are no means singular in their partial unsuccess; - still, we may observe, en passant, that it is not improbable the failure of institutions of the kind under notice is often traced more directly to defective, or injudicious management than to

the absence in any class of a desire to foster and encourage their growth. But, be that as it may, it is quite clear that where an institution does not prosper there must be some cause. It is equally patent that the Newport Athenaeum has not flourished of late. Hence there must be a cause. What is it? For the credit of the town an answer to this interrogatory is required. Without either accusing the officers of the institution of incompetency, or condemning the public for lukewarmness, we submit that to one or other of these causes the decay of the institution is attributable. If to the former, the sooner the principals of the institution inquire into and remedy the failing the better; if the latter, then it is a reflection on the inhabitants of Newpor The utility of mechanics' institutes when properly conducted, and their means of usefulness fully developed, is unquestionably great. This is a proposition no man will gainsay. Hence it is of the utmost importance that every town should possess an institution of that order, and not only so, but also aid it in such a manner as that its managers shall be driven to adopt no mode, the propriety of which can even be doubted, to raise funds for its maintenance; - for an institution whose professed aim is to improve the morals and advance the intellectual standard of a community should, in all its transactions, be beyond the reach of suspicion. Such, it is to be regretted, has not been the case with Newport. A grand gala and fête took place on the Marshes, on Monday, which in certain quarters has been denounced in the strongest terms - more so, than under the circumstances was justifiable; because, although the step might be a somewhat unwise one, still it appeared to be thrust upon the committee. They seemed to have the choice of two evils - either to continue in a position of financial embarrassment and difficulty, or to strike out of the beaten track in search of some popular method of replenishing the exchequer; and they selected what probably seemed the lesser evil. Had the lectures - had the musical entertainments - provided by the committee received sufficient patronage to render them remunerative, and a means of contributing to the exigencies of the institution, instead of being attended so thinly as to convert them into

barren, nay, frequently ruinous speculations, probably the gala would never have been heard of; for it is not to be supposed that the gentlemen who undertook the management of the fête would have saddled themselves with all the anxiety and toil involved in carrying out the details of a display of the magnitude of that of Monday, had they not felt it to be an absolute necessity to retrieve the fortune of the Athenaeum. Let us hope that in future no such necessity will arise; but the Athenaeum, as such, will - without any extraneous assistance - by the number of its members and the amount of their subscriptions be placed in that position of affluence and prosperity to which its usefulness and importance so well entitle it to maintain". (110)

This article seems to be typical of the attitude of those who could have changed the Athenaeum. They fully realised that there were problems, and diagnosed the symptoms correctly, but when it came to the causes they seemed to take the utmost care to skate around them. Were they trying to save people's feelings or was it a sense that the upper class should stand united? Whatever it was it does seem a pity that the causes were not brought fully out into the open so that some positive action could have been taken.

After the fête the Athenaeum settled down to its normal routine. The winter session 1861-62 proved to be another dismal one with membership down and only six lectures held. No classes were held either, but the committee permitted the classrooms to be used for draughts and chess. However, the debt had been cleared and this seems to have been the Directors' main objective. (111)

The following three or four years saw one of the periodic revivals of the Athenaeum. Why this should have been so is difficult to decide. Perhaps the town became more prosperous; perhaps the programme was more attractive; perhaps the committee had more vision and vitality. Whatever the reason, we find the meetings of the Athenaeum being much better attended and making a profit. During this period the Athenaeum was advertising its meetings in the local newspapers and this may have helped to increase attendance. During

1862-63 there were sixteen lectures and entertainments, but only one class was formed, one for Elocution and Discussion, which was very active for several sessions. The students of this class put on several entertainments for the Athenaeum to raise money for various worthy causes. (Appendix 1 gives more details.)

The Annual report for the year 1862-63 stated that "the progress of the Institute had been comparatively satisfactory". There had been no decrease in numbers but "your Directors regret that during the past year, with a single exception, no desire has been exhibited by members for the formation of classes". (112) The exception was the Elocution and Discussion class which had been meeting since November 1862.

At the end of this year the Honorary Secretary, Mr. J. Wood, resigned, due to pressure of business. At the Annual meeting in his farewell speech he suggested that the Institute would be a better place if a billiard table were introduced. This sparked off a series of letters to the Press, both for and against the proposal. "A member" wrote supporting Mr. Wood. (113) This was followed by an indignant reply from "Tom". He suggested that the introduction of such a gambling table would lower the moral, social and intellectual improvement of members. (114) "Sigma" replied, making several valid points in favour of the idea. Such things as billiard tables were provided at clubs for the upper class and the military - why not for the mechanics and the artisans? Many of the great houses and houses of clergymen had billiard tables - why should it be wrong for the Athenaeum to have one? It would attract young men away from the public houses and alcohol. Unfortunately his valid points are rather lost by the very acid tone of his letter. He stated that all the previous writers against were bigots, intolerant, behind the times, inconsistent and unrational. They were trying to enforce their out-of-date ideas on everyone else. (115)

What was the result of this controversy? As usual, nothing happened.

The 1863-64 session was another active one. The committee made strenuous efforts to form classes, and notices were put up in the reading room about classes in Freehand Drawing, French, German, Italian, English Composition and Grammar, Arithmetic and Shorthand. (116) As a result a class was formed in French and the Elocution and Discussion class continued. At a Soirée held in October, the Chairman in his remarks stated that "various classes were established and would be conducted during the winter months. It was the wish of the Directors to extend this department, and to have not only French and musical classes, but classes for the study of Arithmetic, Algebra, and other branches of education". (117)

It was at this time that "Penny Readings" first started in Newport. A letter to the "Merlin" suggested that they should be started in Newport as they had proved popular and successful elsewhere. The editor of the "Merlin" suggested that the Committee of the Athenaeum should organise something for the town. (118) However, it was left to two men, Mr. G. Baker and Mr. Fawckner, to run the first year's Penny Readings. The first took place on about 27th October, 1863 in the Temperance Hall. The attendance was "very numerous". (119) These entertainments were very popular. On 28th November, 1863 the "Star" reported that 600 were present in a room designed to hold 450 - it also urged the Secretaries of the Readings to vet the contents as some were rather borderline! A month later the "Merlin" reported that hundreds had been turned away, while the "Star" reckoned there were as many left outside as there were inside.

Perhaps at this point it should be explained exactly what a Penny Reading was. It was not a series of readings but more a popular entertainment. It can best be illustrated by giving a typical programme. The items on the programme of the Penny Reading held on 22nd December, 1863 were

Song - My Pretty Jane

Recitation - The Pauper's Carol: Christmas comes but once a year

Song - Yo! heave ho!

Song - The American Crisis

Recitation - John Day, the Portly Coachman

Recitation - Waterloo

Song - A' courting in the bower

Recitation - Mourn for the beautiful and the young

Comic Song - Crawshay Bailey's Engine

Comic Song - The Nerves

The National Anthem (120)

Cost of admission was one penny, but reserved seats were available at sixpence each.

Initially programmes such as these were held once a fortnight, but later the Temperance Committee arranged a similar series of Readings so that they became weekly events given one week at the Town Hall and the next at the Temperance Hall. Audiences continued to be very large, and included a rather noisy element, to which many people took exception. This continued to be a problem for the whole period Penny Readings were run.

Mr. Baker and Mr. Fawckner asked the Athenaeum to take over the Penny Readings for 1864-65 and they were run very successfully for that year (Appendix 6). At the same time Penny Readings were being held in Pillgwenlly to raise funds for the Pill National School, as well as those held by the Temperance Committee. The Athenaeum Penny Readings continued until the end of December, 1867. They were a source of profit for the Athenaeum and it is difficult to understand why they were discontinued. It is clear that by that time numbers were falling, probably due to an over exposure of the public to such entertainments, but there was still enough support in the town to have made them a continued profitable venture for the Athenaeum.

Among the activities the Athenaeum undertook during 1863-64 was the publication of a monthly journal. The first issue came out in January 1864, and by April a thousand copies were being printed and circulated. The main

object of the journal was to "disseminate" knowledge of the benefit to be derived by those who are members of the institute and thereby induce others to become members. (121) The first issue contains an editorial, an article on Classes, a poem, questions on algebra, arithmetic and history the readers were invited to answer, and a large number of advertisements.

The article on Classes shows clearly that there was a continued awareness of the need for classes. "Considering that the primary aim of our Institution is to promote the mental improvement of the members, it becomes a matter of surprise to find that a valuable means of furthering this object - the formation of classes, is not more readily adopted. The non-existence of classe in connection with the Athenaeum has been a cause for much regret on the part of the Directors, who year by year in their annual report have called attentior to the fact". (122) Again we see that the problem is stated, but again there is no attempt to find the cause or the solution.

Perhaps Mr. G. Baker got to the root of the problem in a letter to the "Star" about what should happen to the balance of funds from the previous year's Penny Readings which he ran with Mr. Fawckner. He was not in favour of these funds going to the Athenaeum as "the Athenaeum provides nothing for the working classes". (123) He hoped that it would be used for the special purpose of providing for the people's amusement or benefit.

The Secretaries leapt to the defence of the Athenaeum. It was audacious of Mr. Baker to claim that nothing had been done for the working classes - what about the reading room as one instance? The Mechanics' Institute had been in existence for 23 years - it was deplorable that they should be called upon to vindicate its character after such a time. (124)

1864-65 was another session of busy activity for the Athenaeum. The new reading room opened in Pill in April, 1864 was a useful addition, although the Directors felt there was not enough support coming from that area itself. The monthly journal had continued. the management of the Penny Readings had been undertaken and membership of the Institute had increased. The accounts

showed a balance (which the Directors had to admit was due to a profit of £34-17s-0 from the Penny Readings). Again the only class to run was the Elocution and Discussion class with 34 members which met 30 times during the year. (125)

The peace and tranquility of the Institute was shattered in May, 1865 by one of the highly personal, and bitter controversies which arose from time to time. A gentleman, signing himself "Anti-gag", wrote to both the "Merlin" and the "Star", complaining of the ruling clique of the Athenaeum, the failure of the Monthly Journal to publish a letter of his, and the "continually and deliberately" breaking of rules of the Institute. (126)

The following week support came from "A member". He claimed that "Scores of persons .... have silently ceased their connections with the Athenaeum in disgust". He went on to demonstrate that both membership and subscriptions had fallen and that far too much was being spent on salaries, rent, coal, gas and insurance, leaving three farthings per person to be spent on the diffusion of useful knowledge. Whether he was correct with these allegations, or was merely manipulating the figures we cannot tell, as the relevant facts are no longer available. However, it can be stated that his version does not agree with the financial statements presented in the Annual Reports.

"A member" then deplored the "beggarly array" of newspapers in the reading room. He claimed that there was only one national daily newspaper, "The Times", taken, and of the twenty weekly papers, eight were given free. There were no papers on the railway, mining, or any other large commercial interest. The only two local papers not given free were the "Bristol Mercury" and the "Hereford Times". There was no Irish, Scottish, or indeed, Welsh papers.* In his opinion, this was not good enough. (127)

Further support for "Anti-gag" came from "E.T.R." He wrote, "The time has, I think, come, when the want of an institution worthy of the town is

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*At this time, 1865, Newport and the County of Monmouthshire were still officially English.

seriously felt, and the inhabitants are beginning to see the present nondescript in all its native ugliness. A more dreary reading room it would be impossible to find. The library serves an important part in forming a rendezvous for secretaries, ex-secretaries, librarians, and their deputies, and a number of ladies, young and old, charming and otherwise. Beyond this, and the circulation of a large number of novels it would be difficult to define its use." He hoped that the members would stir themselves to make the institute into something worthwhile, having the public interest at heart, "and the intellectual improvement and social enjoyment of the members rather than the gaining of opportunities for agreeable flirting on the one hand and "amateur schoolmastership" on the other". (128)

The committee of the Athenaeum replied to "Anti-gag" via the June issue of the Monthly Journal. The article is very difficult to follow, but it does state that "Anti-gag's" letter was not printed because it raised questions that the Secretaries alone could answer. This seems to be a very weak reason.

Rather than let the issue quietly die down, others rushed into print. "D.A.W." claimed that there was "nepotism on a grand scale" in the Institute, (129) while "Facts are a stubborn Thing" stated that any progress at the Athenaeum was barred by the ruling clique. In his opinion the Monthly Journal was a farce in which plagarism was rampant. As for the Annual Report, that was just a front. There was no balance of £25 since twenty months rent was owing. The rules of the Institute were being broken by electing a director and two librarians under the age of 21. To say that the discussion class was flourishir was a lie, he claimed. In fact it was dwindling away. It was a disgrace that a town the size of Newport has only 300 men as members. There should have been at least 1000. The Directors should put their house in order. (130)

Again there is no way now, over a hundred years later, of deciding what the true facts really were. One is amazed that there was an Institute at all when there was so much personal animosity and it is not surprising that the

Institute was not the success it should have been.

By this time those who supported the Directors of the Institute were beginning to muster their forces. Henry Cowley (the only one who had the courage to sign his letter) dealt first with "Anti-gag". The editors of the Journal had a perfect right to reject his letter. They were the editors, after all. He claimed that "Anti-gag was also "Eight-Bob Minor" who had previously written to the Monthly Journal. "I must now part with "Anti-gag", sincerely trusting that should he ever attain his majority, he will attain a little wisdom also".

He then moved on to "A member", whose identity he claimed he knew. "A member" should have dealt with the matters he raised when he was on the committee, but he was a most inefficient committee member. The facts he claimed to have discovered were common knowledge and the fall in membership was due to the depression in trade in the town. As far as newspapers were concerned Newport was as well equipped as any in the country. (131)

As a result of this controversy a general meeting was held on 20th June, 1865. A large number of members attended this long meeting at which nothing was achieved. Further long meetings were held on 27th June and 4th July. Many proposals were put for the alteration of the rules, but the only changes accepted were that all outstanding debts should be given in the Annual Report as well as a classification of members, and that at the Annual General Meeting discussion should be permitted on any important matter concerning the Institute.

After these meetings the public argument came to an end, but at this time there was an almost constant change of Athenaeum officials, and one wonders how much bearing this had on the subsequent decline of the Institute. The paid position of Secretary changed hands three times during 1865-66. Mr. Matthew Johns who seems to have been an energetic, efficient Secretary, resigned early in 1865 and was replaced by Mr. A. Stonehouse, who resigned after about three months. He was replaced by Mr. T. Richards, Jr. who served

seven months, to be replaced by Mr. Edwin Maynard in August, 1866. The positions of Curator and Librarian were also changing and in May, 1866 it was decided to combine the three positions of Secretary, Librarian and Curator. This was the position Mr. Maynard took up in August at a salary of £80 per year. The financial position of the Institute became progressively worse, with the result that it was decided that all paid positions should be abolished and the running of the Institute should be undertaken by the Honorary Secretaries. (132)

The most interesting development on the educational side of the whole lifetime of the Institute took place during the 1865-66 session. The discussion class started again in October and in November the committee received a letter from Mr. James Bush* stating that he was anxious to establish Science and Art classes at Newport in connection with the Institute. It was decided to form a committee for the management of classes set up. These classes would be open to members of the Institute only and the Institute would grant up to £5 for apparatus and other items. (133)

Consequently the Directors were able to state in the Annual Report that they could "report a very satisfactory change in regard to classes". Classes had been formed in Elocution and discussion, freehand drawing, mechanical and machine drawing, mathematics and French. The Directors felt that the building then being used was not suitable for all these classes; they believed that the Dock Street premises could be extended "to give increased facilities for carrying out some of the most important objects of the Institute". (134) However it was not until 1910 that really satisfactory accommodation was acquired for classes.

The classes under James Bush were very successful, probably due to teaching by an efficient professional teacher, and as a result examinations were taken in drawing and science. These examinations were those set by the

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*Brace in his thesis confuses James Bush with his brother William Bush who took over the classes in 1873

Science and Art Department, South Kensington, and were held in the Council Chambers. The successful candidates were

Model Drawing	Freehand Drawing	Perspective Drawing
James Doorly	William J. Hutchins	George F. Palmer
John E. Evans	Charles Miles	
Thomas Jones, Jr.	George F. Palmer	
Charles Miles	Walter Vernon	
George F. Palmer	John Fisher	
Walter Vernon		
John Fisher		

Science		
J.W. Firbank	A.E. Pearson	W. Tanner
G. Wilkes	Tom Jones	J.G. Doorly
T. Spillane		

These results, together with those obtained in the next year represent the greatest educational achievement of the Institute during its whole history. (135) Brace suggests (page 12 in his thesis) that this achievement was due to the classes being run in connection with the Science and Art Department at South Kensington, and to some extent this may be true, but the main reason why these classes were successful whereas previous efforts failed was that they were being undertaken by a professional competent teacher. As soon as he left the classes quickly came to an end.

In other areas the Institute was not doing so well. Although the Penny Readings made a profit of £24-4s-2d for the year, other aspects of the work were losing money. The Pill Reading Room was one such area and the committee considered closing it down in January, 1866, but it received a reprieve until April, 1867. Another activity which was curtailed was the Monthly Journal, "The expense and trouble connected with its publication proving too great to be remunerative or beneficial". (136)

Despite the economic climate and the poor attendance at lectures, the

classes taught by Mr. Bush continued to thrive and be financially self-supporting during 1866-67 (Appendix 7 gives the Prospectus for these classes). Science and Art Department examinations were sat with good results obtained once again. Successful candidates were

Art (137)	Geometry	Model Drawing	Freehand Drawing	Perspective
	W.J. Hutchins	W.J. Hutchins	W. Kerslake	J. Fisher
	A.E. Pearson	C. Ryan		
	J. Fisher			

Science (138)	Plane and Perspective Drawing	Mechanical and Machine Drawing	Building, Construction and Naval Architecture
	A.E. Pearson	A.E. Pearson	A. E. Pearson
	T.C. Edwards	J.G. Doorly	T.C. Edwards
		G. Wilkes	C. Miles
		A.J. Woodcock	G. Wilkes
		J. Fisher	J.H. Firbank
		W.J. Hutchins	J. Fisher
		J. Spittle	W.J. Hutchins
		C. Ryan	C. Ryan
		T.C. Edwards	J. Ryan

In April, 1867 the Reading Room at Pill was closed because of the lack of support from the local people despite several meetings arranged to protest about it. As a result a break-away Mechanics' Institute was formed in Pill. It followed the same old pattern of lectures, entertainments and soirées, offered nothing original and consequently very little is heard of it or of its achievements, if any.

The 1867-68 session was an even worse year than the previous. Only four or five lectures were held, Penny Readings continued only up until Christmas, and no classes were held. This last fact is very surprising since the classes had proved popular and were very successful the previous two years. In the Annual Report it was stated that "in consequence of being

unable to obtain the services of a properly qualified teacher the Science and Art classes have ceased to exist in connection with the Institution at present" (139) In fact no further classes were held at the Newport Athenaeum.

The only bright spots in an otherwise very undistinguished year were that the committee spent £50 on the library and that the condition of the library had been improved generally.

Perhaps because of the lack of classes at the Athenaeum, evening art classes were being held at the National School in Newport. "The Art Class having been so far successful, the Committee have allowed the master to continue it throughout the year. The class is open on Mondays and Fridays, from seven to nine o'clock, thus giving artizans and others an opportunity for preparing themselves in some of the subjects of the Government Scholarships of from £5 to £25 a year, and the Whitworth Scholarship of £100 a year". (140) This Art class continued to be successful and in 1869 it was reported that "Mr. Fisher,* the master of the National School is conducting classes for artizans and teachers of both sexes, and also a ladies' Select Class in all Art subjects". (141) In the same year these classes received a grant because of its work from the Department at South Kensington. In the country as a whole 24 classes received a larger grant and 91 a smaller grant.

The following two years were very poor ones for the Athenaeum. Only one entertainment was held in 1868-69 and as a final fling a Grand Eisteddfod was held in November, 1869, the proceeds from which almost cleared the debts of the Athenaeum.

Some people were concerned about the decline in the Institute and several suggestions were put forward as ways of re-vitalising it. One was that it should be handed over to the Town Council for use as a Free Library. This was first mentioned in a letter to the "Star of Gwent" in February, 1868. (142) In January, 1870 the "Star" reported that the Mayor, Mr. T. Beynon was seeking

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*This could be the J. Fisher who had obtained passes in the Athenaeum classes as listed above.

to establish a Free Library as proposed under the Public Libraries Act. The "Star" was in agreement with this and suggested that the Athenaeum might be suitable, with the transfer of its buildings, books and debts to the Town Council.

A general meeting of the Athenaeum was held on 31st January, 1870 to consider the attitude of the Athenaeum to the Mayor's proposal. Mr. Daw pointed out that membership had been decreasing for years and in his opinion there was little chance of an increase sufficient to allow the Institute to offer any more than the convenience of an ordinary reading-room. The Free Library would result in the closure of the Athenaeum, and he wanted the Athenaeum to be transferred to the Corporation to become the basis of the Free Library. In the past the Institute had served the town well and many people had benefited from it in their younger days. He hoped that everyone would support the Mayor and the proposed transfer of the Institute.

Mr. W.N. Johns continued in much the same vein. People who could afford to become members of the Institute were using free reading-rooms provided elsewhere. Newport would have a Free Library whatever the members of the Institute did and he proposed "that in the event of its being determined to establish a Free Library in Newport, this meeting is of the opinion that it would be advisable to dissolve the Newport Athenaeum and Mechanics' Institute, and transfer the building and property to the Corporation as a nucleus of such a Free Library". (143) This proposal was passed by the meeting.

A public meeting was held on the subject, at which the resolution "That, in the opinion of this meeting, it is desirable to establish a free library for the Borough of Newport under the provision of Act 18 and 19 Vic. cap 70, and 29 and 30 Vic. cap. 114: and the Town Council are hereby requested to take the necessary steps for carrying the said acts into effects", was passed. At this meeting mention was made of the classes in Cardiff run in connection with the Free Library there. The need for such classes in Newport was stressed. (144

The next move was the passing of the following resolution at the

Athenaeum when only 16 members were present: "That in accordance with rule 35, the Newport Athenaeum and Mechanics' Institute be, and is hereby determined and dissolved; and the building, books, furniture and property of every description, be transferred to the Corporation of Newport, or other authorised body as a Free Library in the said town; and in the case of the said Corporation deciding to accept the said buildings, books, furniture, etc. the Trustees and Committee of the said Institute are requested to determine the mode of transfer, subject to the said Corporation of Newport undertaking to pay any liabilities due from the said Institute at the time of the transfer". (145)

A week later a second meeting to pass the above motion again was held as two meetings were necessary to wind up the Institute. A fortnight later a delegation from the Athenaeum attended the meeting of the Town Council to offer the Athenaeum to the Council on the above terms. The liabilities of the Athenaeum at the time were £19. The offer was accepted with thanks and a representative of the Tredegar Wharf Company which owned the land on which the Athenaeum building stood, said the company would forego the ground rent due of £12-7s-6d, and would cover the balance of the £19. The Council asked the Athenaeum committee to continue to run the library until a new committee could be formed. (146)

Thus on 27th April 1870 the Newport Athenaeum and Mechanics' Institute ceased to exist and the Newport Free Library came into being.

Did the Mechanics' Institute achieve anything in Newport? Certainly the library of the Institute formed a valuable nucleus for a Public Library, but in the field of education very little, if anything survived. Some people had benefited, particularly the classes in 1865-1867, but so much more could have been done.

It is clear from minutes, reports, and newspaper articles that the founders of the Institute and its subsequent managers intended classes to play a major role in the Institute. What, then, are the causes for the failure

of this aspect of the work?

First, the Institute was aimed at a very narrow band of society. Whatever the original definition of "mechanic" may have been it certainly did not include the vast majority of the working class, so that the number of people who felt themselves eligible to attend was very limited.

Secondly, the price of activities at the Institute was far too high for any but the middle and upper classes. Even if the working class man did overcome his natural reluctance of entering this Institute the price of one shilling and six pence per quarter plus entrance fees to classes would have been beyond his meagre means.

Thirdly, the whole atmosphere of the Institute would have alienated most of the working class. The very name, with words like "Athenaeum" and "Institute", was far too grand and the lectures, and indeed, the classes themselves when they ran were not what the working man wanted or needed. He did not want classes in French, Italian or Shorthand. The lack of a basic education meant that the working man could not cope with such classes, he needed classes in reading and writing. This would have prepared him for more advanced studies and perhaps for some of the lectures.

Finally the classes were left to run themselves with volunteer teachers who had no experience in the specialist field of teaching. When a professional teacher was used in 1865-1867 it becomes immediately clear that the classes were successful. It is unfortunate that in Further Education today there still remains this idea in some areas that someone who is a success in a particular subject automatically is able to teach that subject. Classes suffered because of this over a hundred years ago and still do today.

The founders and managers of the Institute were well meaning men with sound ideas for benefiting the town and individuals, but they were unable to put those ideas into a form which would work. Their class-consciousness was a hindrance, making them unable to see how to meet the needs of the working class.

Thus it must be concluded that the Newport Athenaeum and Mechanics' Institute was an educational failure, and it is doubtful if Further Education in the town can look to it for its roots. Far more likely roots are the evening classes at the National School which started in 1867 and continued independently until about 1892.

What was happening on the national scene during the period 1841 to 1870 and how do the happenings in Newport over this period compare with the national picture of further education? As had already been stated, there is no single national picture so that comparisons can only be made with individual towns.

The Mechanics' Institute movement which had been so flourishing at the start of the 1840's was fading fast, and had, in the main, failed to have a lasting effect. Bratchell states that "the lack of adequate provision of basic general education was largely to blame" (147) for the Mechanics' Institutes not being the foundation of a new type of technical education, but amid the lack of success there were exceptions - clearly London and Manchester Mechanics' Institute went on to higher things, and Huddersfield, too, achieved considerable success by concentrating on elementary education for the working men.

All too often Mechanics' Institutes lasted but a few years or developed into a gathering of the middle class for social entertainment. In Sunderland there are records of evening classes as early as 1788 (148), and this would seem to have been an ideal base for the Mechanics' Institute which was founded in 1825. However, by 1835 it had faded away, was re-started in 1837 and finally closed in 1856 (149). There were also a School of Navigation (1855-1863), a School of Art and Science (1860-1863) and a School of Art with a Science class founded in 1869. (150) These last two became the Sunderland Technical College. Thus in Sunderland a better foundation had been laid than that in Newport at the start of the 1870's.

Gateshead is a contrast to Sunderland. Dominated by Newcastle, as Newport

is dominated by Cardiff, Gateshead had its own Mechanics' Institute by 1836 (151), where the programme was one mainly of lectures, backed up with a library. No classes were formed until 1842 when classes in Grammar, Chemistry and French were started. The management was in middle class hands (as in Newport), but a building was erected in 1848 by the Gateshead Institute for its use. However there was very little support from working people so that classes were very sporadic and very rarely ran for much more than a year. Another similarity with Newport is that a Science and Art Department class was run in 1866. (152)

The pattern at Warrington is different again. There the Mechanics' Institute was founded in 1825 (153) and eventually closed in 1868. (154) But in Warrington there had been a class with a Government grant as early as 1851 and a School of Art was set up in 1854 and this was absorbed into the Technical Institute in 1893. (155)

In Middlesborough where the Mechanics' Institute was set up in 1844 (156), after almost foundering in 1857 it had by 1860 it's own purpose-built building, financed with money raised by bazaars, exhibitions and donations. Here the emphasis was on Science classes with a request for day release for apprentices for classes in Mathematics as early as 1870. The School of Art was founded in 1870 and had day release students from its opening. (157)

Even when the Mechanics' Institute failed miserably some towns had stolen the march on Newport. Notably among these was near-neighbour Cardiff where the Mechanics' Institute closed in 1856. Here the Free Libraries Act was introduced in 1860 and when classes were started in 1866 under the auspices of the Free Library they were an immediate success. By 1870, with salaried teachers these classes were poised to expand still further.

Newport had, by 1870, made some progress, more than some towns, considerably less than others. It stands with the large majority of towns throughout England and Wales where further education had been left in the hands of a few volunteers, and consequently had failed to establish a really

good base on which to build.

Chapter 2

The School of Art and Science under the Free Library Committee

1870 - 1891

Classes had not been held in the Mechanics' Institute for the last three years of its existence and it was a further two years under the Free Library Committee before any more were held. As with almost every committee nothing was carried out in haste. However, the Free Library started well as a library. There was one central library which incorporated both the library and reading room of the Mechanics' Institute and the Working Men's Free Reading Room, and it was this centralisation which helped to make it a success. In contrast further education in the town was to suffer from diversification and internal rivalry and thus in the period 1870 to 1891 was not the force it should have been in the town.

Although the Free Library Committee failed to act quickly, the Art Night Class at the National School continued successfully. Examinations were taken and grants continued to be received from the Department at South Kensington, based on examination results and work submitted. (1, 2)

In October, 1870, Mr. James Bush of Cardiff, who had previously held classes in Newport, wrote to the Free Library Committee enquiring about some desks belonging to him, and asking about the possibility of starting classes. The committee, perhaps surprised by the idea, asked him to write again. (3) It was almost a year before the matter was raised again. In October, 1871 the committee minutes record that "the advisability of drawing classes in connection with the Free Library having been discussed it was recommended that this subject be referred to Mr. H. Phillips and Mr. L. Daw to report on at the next general committee meeting". (4) At that meeting Mr. Kirby asked that estimate be made of the cost of building a classroom on to the existing library building. Again there was no immediate action. Not all Newport was happy with the delay. "Geometricus", writing to the "Star of Gwent", regretted that there were no drawing classes where a mechanic "might obtain an insight into the more practical portion of their business". (5) The committee next discussed the matter of classes in March, 1872 when it was decided to seek a certified teacher to teach Art and Science classes. (6) At the following

meeting it was proposed "that in the opinion of this committee it is desirable to establish Art and Science classes in connection with the Department at South Kensington and request the Hon. Secretaries to make inquiries as to the probability of being able to obtain a suitable room and a competent teacher". (7) It was decided to invite Mr. Bush to attend for interview as a possible teacher. Later he was invited to advise the committee about classes (8) and eventually it was recommended that a room be hired for classes and that Bush be engaged as teacher. (9) During June premises were hired (Mr. H. Phillips offered to hire them for six months at his own expense so that classes could start) and Bush was asked to state his terms and the evenings he could teach.

The committee decided that classes would start in the second week in August and run throughout the year except for three weeks at Christmas and six weeks in the summer. Classes would be held on Tuesday and Thursday evenings from 7.00 p.m. to 9.00 p.m. The fees would go to Mr. Bush and were to be paid in advance, two shillings per month for Industrial students, and three shillings and six pence for middle class students. In addition he was to receive all grants from the Department at South Kensington. It was decided that a vigorous programme of advertising should be undertaken, involving posters and pamphlets throughout the town. (10)

The committee set up by the Free Library Committee to "superintend the management of the Art and Science classes" comprised the Mayor (Mr. D. Harrhy, Messrs. T. Beynon (the leading advocate of the Free Library), C. Lynne, W. Jones, T.F. Lewis, H.J. Davies, W. West, T.P. Wansbrough, Rev. E. Hawkins, Rev. J. Lance, Messrs. J. Wood, W. Christophers, W.N. Johns, A. Stonehouse (these last six all energetic supporters of the Mechanics' Institute), M. Wade, H. Phillips, C. Kirby, J. Horner, R.S. Roper and H.L. Daw. (11) The first meeting elected Mr. Beynon chairman and Mr. Johns as secretary.

The classes started as planned and the Secretary reported to the September meeting of the committee that they were being well attended. (12) The press

reported in October that the Free Library Classes "under certified teachers" were being held with a separate room for ladies. "Altogether the class has met with a large amount of success, the average attendance being from 40 to 50". (13)

It is not easy to trace events for the next few years as there are often gaps in the committee minutes (for example, none for November and December 1872) and the press did not give the classes the coverage it used to give the Athenaeum, but the general impression is that the first year was a reasonably successful one. The classes were inspected in March, 1873 by Major Hawthorne, R.A. of Newport Barracks, who acted as Her Majesty's Inspector (it appears to have been the practice to use serving officers as School Inspectors at this time). Major Hawthorne met the committee at the British School room and later went through the register with the teacher. (14) One encouraging feature during the year was the establishment of a joint committee to run the local examinations for South Kensington. (In fact, South Kensington required this). The joint committee was made up of men representing the several bodies taking examinations in the town. One would have hoped that this would have led to an even greater co-operation with a firm base for consolidation and expansion of further education, but this co-operation did not take place. The classes continued to run under the Free Library, and similar ones were held at Bolt Street, in Maindee and probably at least at one other site in Newport. It was not until 1894-95 that all further education classes were brought together under the School of Art and Science and the Technical Instruction Committee.

At the end of the academic year students sat the South Kensington examinations, with 13 students taking Model, 36 Freehand, 2 Perspective, 5 Geometry, 12 Practical, Plane, and Solid Geometry, 1 Building, 13 Machine Drawing and 8 Steam. The results do not appear in the committee minutes, and only in a limited form in the local papers, but it is known that Mr. Bush was paid £20-5s-0 on the basis of the Art results and £30-0-0 on the basis of the

Science results. (15) Some results were published in the "Star of Gwent" and it was suggested that this would stimulate the committee "to provide something like a permanent home for these classes". (16) However this enthusiasm is somewhat tarnished when the report concludes "the above paragraph was crowded out last week". (16) This relegation of the classes of the Free Library to a position of low priority was typical at this time, and the classes were not helped as a result.

There was some interest in the town and among suggestions put forward to increase this interest was one to revive the Penny Readings (17), but this idea was quietly, and, probably correctly, ignored. Another suggestion was that the evening classes at Pillgwenlly should come under the Free Library Science and Art class committee. Mr. Taylor, the teacher at Pill, was approached and following this approach the committee decided to contact the Pill committee and South Kensington. (18) There is no indication that anything resulted from these contacts. It was suggested, too, that a class should be formed in Steam and Navigation; the Secretary was asked to contact Mr. Massey of Cardiff as a prospective teacher of such a class. (18) It was decided to hold a prize giving later in the year and all local public personalities would be asked to attend.

The prize giving was held on 11th November, 1873 with a good attendance, Mr. T. Beynon being in the chair and Mr. Buckmaster of the South Kensington Art and Science Department making the major speech and giving away the prizes. The committee had decided to award a silver medal and a bronze medal to the two best students (Appendix 9). After much discussion the silver medal was awarded to Mr. J.D. Smith, and two bronze medals were awarded, one to Mr. Telfer Smith (the elder brother of the winner of the silver medal), and one to Miss C. Bothamley, who was the best female student.

To bring the problem of accommodation to the attention of the town the committee had the following proposal put to the audience at the prize giving: "that in the opinion of this meeting it is of paramount importance that a

suitable building should be erected to carry on the various classes belonging to this department, more especially as Government aid in this respect would be proportional to local efforts in this direction". (19) The "Star", in an editorial, emphasised the need for better accommodation - a town the size of Newport deserved better than the existing facilities. (20) A cutting in the committee minutes from the "Western Mail" (no date given) reports the speeches of both Mr. Buckmaster and Mr. Beynon. Both emphasised art education with very little mention of science. The influence of the Great Exhibition of 1851 was still being felt and it was not until the 1890's that the correct balance was achieved between art and science in Newport.

Mr. Massey taught a Mathematics class in Newport in 1873-4 (but probably not Steam and Navigation), but when he left in February 1874 no other mathematics teacher could be found. However, students at this time were very keen and the mathematics class decided to carry on meeting as a class for "their mutual improvement" (21) until a new teacher could be found.

The Annual Report of the Free Library was published in the "Star". The section on classes reported that both Mr. and Mrs. Bush were teaching classes and that the South Kensington examinations had been held under the supervision of a joint committee with Mr. W.N. Johns as Honorary Secretary. The "Star" commented, "These classes have now become so useful an adjunct to the Free Library and so important an element in promoting that branch of technical education, so much desired, that the committee feel it encumbent upon them to provide all the requisite facilities for carrying on the classes with efficiency. The only practical method of doing this now apparent to them, is to erect buildings on the ground at present occupied by the Free Library; and in furthering this scheme they are confident that when it has matured they will receive cordial and liberal support from the public in Newport". (22)

One is again reminded that there were other evening classes being held in the town at this time. Mr. P. Gale of Maindee National School was awarded £5 by the Lords of the Committee of the Council on Education for his successful

work with the Art night classes in Maindee.

During the summer of 1874 the committee began to plan for a new building and decided to hold a competition for the best design. It was estimated that a new building would cost some £4,000 and they would need to borrow some £2,500. They also learned that Mr. Bush was giving up his classes in Newport (perhaps due to his many commitments in Cardiff.) The secretary was to approach Mr. Brown, Mr. Davies and Mr. Taylor with a view to them teaching various classes. (24) It appears that none of them agreed to do this and although we know that Mr. William Bush (the brother of James Bush, the previous teacher) was appointed sometime during the academic year 1874-75 there is no record of the exact date of his appointment as the minutes for the committee meetings from July to October were not written into the minute book. William Bush had taught previously in his native Carmarthen, and had been awarded £5 by the Lords of the Committee of the Council on Education for his work there. (25) He was to play a major part in Further Education in Newport for more than 40 years.

The "South Wales Advertiser" (2/12/74) reported the prizegiving for that year. Mr. Cordes, the local Member of Parliament, was the main speaker. He proposed "that this meeting, recognising the great value of these classes as aids in promoting higher education in art and science, as well as being instrumental in furthering technical knowledge generally, considers it desirable that suitable accommodation should be provided for the use of science and art classes, and desires to impress on the Town Council the advisability of making such additions to the Free Library building as will meet their increasing requirements". Needless to say this was passed unanimously (with cheers). Again one notices the emphasis in Mr. Cordes' speech on Art education

During the academic year 1873-74 the grant from South Kensington was £20-4s-0 for Art and £28-0-0 for Science (Appendix 10). The following year, too the Art payment was smaller than that for Science, but there after the pattern was reversed until the classes came fully under the control of the

Town Council and separate headmasters were appointed for Art and Science.

An interesting development at this time was the proposed commencement of lectures under the Cambridge University Extension Scheme. The "Star", in an editorial, stated, "We are glad to find that a movement has been set on foot having for its object the establishment of lectures and classes in connection with the University of Cambridge at Newport, Cardiff and Swansea; in other words, affording to the people of these 3 towns, at a cheap rate, the advantages of a University education. Those who are unacquainted with the recent effort made to reach all classes by our great seats of learning may be at a loss to know the exact meaning of this announcement. For their benefit we will explain. The scheme is already in full force at Liverpool. Nottingham, Derby, Leicester and many other towns, and (we quote the words of Mr. James Stuart, Hon. Sec. to the Syndicate of the University. Trinity College, Cambridge), "In various towns in which we have lectures we have 4,000 students attending". This gentleman adds that "the results of the first year are such that the University feels justified in continuing the scheme, which it would not have been resolved to do if it had not been convinced that it is educationally successful ..." The education given at these lectures and classes is represented as thorough in its character and has proved eminently successful in those towns which have embraced the advantages offered to them. It may be an incentive to Newport to say that Cardiff has taken the initiative in this important educational movement, and now invites Newport and Swansea to join her". (26) Any town could start the scheme provided it had a committee to organise it, had made formal application to the University with a list of lectures required, and had sufficient funds to meet all expenses incurred. The "Star" hoped that the people of Newport would give the scheme their whole-hearted support.

Several public meetings were held to drum up support for the scheme with the "Star" backing the campaign to the fullest extent. By May, 1875 a meeting of the promoters of the scheme in the town were able to report that £120 of the

£200 needed had been raised. They decided on courses of lectures on Geology English Literature, and Biblical Economy as being the "most fitting". (27) Plans were finally made to have geology and geography on Tuesday and Saturday evenings and English Literature on Tuesday and Friday afternoons. The cost of the course would be ten shillings and five shillings for the evenings only. The first lecture was held on 28th September, 1875 with a large audience. The lecturer told them that he hoped that the enthusiasm would be maintained. (28)

The enthusiasm did continue for quite some time and the "Star" regularly gave space to the activities of the scheme in the town and throughout the country. It reported that by November, 1875, the Extension Scheme was operating in 31 towns with 17 lecturers and 7,000 students. (29) The first session of lectures in Newport appears to have been successful. The geology class went on a field trip to Usk in November and at the end of the course examinations were held, (30), but there is no report of the results. The scheme recommenced in the New Year with lectures in Geology (and presumably English literature), and after the summer break a series on Chemistry was held. With this series a 45 minute class was held before the lecture.

As with the Mechanics' Institute before it, the Extension Scheme had its ups and downs in Newport. There must have been some lectures in the winter of 1876-77 as examinations in Chemistry were held in January, 1877, (31) but nothing in the local press indicates that they ran the following winter. However, in 1878-79, a series of ten lectures on "Shakespeare's Dramatic Art" was held (32) as well as a series of lectures on scientific subjects by lecturers from the University College, Bristol, paid for by the Gilchrist Educational Trust. It was reported that large numbers attended the lectures on Shakespeare but the numbers at the scientific ones were disappointingly small. 1879-80 saw a series of ten lectures on "The French Revolution", followed by a series on "The Puritan Revolution". 1880-81 was a blank for the Cambridge Scheme in Newport, but a course of ten lectures on "Zoology"

was given by Professor W.J. Sollas, under the auspices of the Newport Natural Science Society - with good attendances. (33) However the Cambridge Scheme started again in February, 1882 with a course on "The Pedigree of Shakespearean Drama". The following winter two courses were put on, the first "The Literature of the Elizabethean Period (excluding Shakespeare)", followed by twelve lectures on "Electricity". The "Star", in an editorial regretted the poor numbers of the first of these and urged more support as the Cambridge Scheme would back up and enhance the work of the Free Library classes. (The "Star" claimed that the Cambridge University Extension scheme had already resulted in the establishment of permanent works at Sheffield and Nottingham). Vice-Chancellor's certificates were being awarded to those who held six term certificates. (34) No report appears of any local person being awarded the Vice-Chancellor's certificate, but later five local people received term certificates. (35) 1883 seems to have been the last year the Cambridge scheme operated in Newport. but a similar scheme, linked with the University College, Cardiff. ran for three winters, and later the Oxford University Extension Scheme held lectures. The Cardiff scheme in 1884 was a course of ten lectures on "Astronomy" and cost five shillings. (36) Attendances were good. The following year Professor Seth gave a series of lectures on "The History of Modern Philosophy". In 1885-86 classes are reported to have been held in French and on Modern Philosophy. The French classes were on Wednesday from 7.15 p.m. to 8.30 p.m. for juniors and from 8.30 p.m. to 9.30 p.m. for seniors at a cost of five shillings for the term. 30 students attended these classes. (37) The final chapter in University Extension Scheme in Newport was Oxford University's lectures which began in January, 1891. These extended into the life of the Technical Institute, and will be mentioned again in the next chapter.

What did these schemes achieve in Newport? As far as can be seen, the answer must be very little. Elsewhere in the country it seems that such schemes were to develop into University Colleges. but in Newport nothing so grand came

from them. It is clear that there was inadequate support in the town and neighbourhood. Cardiff was just beginning the rapid growth which led to it becoming the undisputed leading town in South Wales, and Newport had not discovered its identity or role.

Meanwhile the classes under the Free Library continued quietly with William Bush as teacher. Despite Captain Hall, Her Majesty's Inspector, being impressed by both the teaching and the attitude of the committee, Bush and the committee soon crossed swords. Acoustic and other equipment was bought for various classes, and Bush appears to have authorised the purchase without committee approval. Committee members therefore instructed the Secretary to "intimate to Mr. Bush" that he was not to spend any money on classes without the specific approval of the Committee. (38)

Bush suggested that the awarding of certificates to successful students might stimulate more interest, but the committee was not convinced that it woul be beneficial. (38) The scheme was shelved, but successfully revived some years later.

During the summer of that year (1875) the examination results were published in the "Merlin". "It is satisfactory to find that the amount of payments on the results of the examination compares favourably with similar institutes in other towns .... We understand that it is probable the classes .... will be recognised in future as a school of art, for the support of which Government contributes more liberally than night classes". (39) The committee applied for Art School status in September and the request was granted in November, 1875. (40) It is interesting to note once again the emphasis the article puts on art, a continuing emphasis for many years to come.

The prizegiving was held in November. The "Star" reported, "The distribution of prizes to the successful students in the Science and Art classes is an event which is evidently becoming more and more important and more interesting year by year". The Secretary, in his report, stated that there had been three teachers during the year, Mr. W. Bush, Mr. H. Taylor, and

Mr. W. Cock (the head teacher at the Wesleyan School, Pillgwenlly), and classes had been held in freehand, model, perspective, crayon drawing, painting in oil and water colours, geometry, machine drawing, building construction, mathematics, theoretical mechanics, applied mechanics, trigonometry, chemistry, metallurgy, and steam. As a result of the South Kensington examinations J. Ryan and W.H. Williams had passed the preliminary stages for the Whitworth scholarships. The Secretary emphasised once again the need for better accommodation and the newspaper backed this up in its own comments. (41)

During the next three years there are gaps in the minutes (none from December 1875 to February 1876, April and May 1876, April 1877 to September 1877, and November 1877 to September 1878), thus information must be gleaned mainly from the sparse press comments. The classes were inspected twice during 1876, Major Hawthorne coming in March and Mr. E.D. Bartlett in December. The department at South Kensington agreed to the appointment of Miss Bothamley as a pupil teacher and to pay her salary of £15 per year. In August, 1876 Bush asked for an extra pupil teacher; the committee agreed to his request, but there is no indication that this second pupil teacher was appointed. (43)

The results for the year were good. The "Star" published the pass list in July and went on to emphasise the work of the art section and the use of art to the ordinary working man. Later news came through that students from the Newport classes had been awarded two of the annual Whitworth scholarships. There were only six awarded and were worth at least £100 a year each for three years. John Ryan took third place, and William H. Williams took fourth place. Ryan had scored 1335 marks for theory and 854½ for practical, while Williams scored 854 for theory and 1251¼ for practical. It was a far from common occurrence for a school to gain two of these coveted scholarships in a year. (45 Ryan went on to the University at Cambridge and had a distinguished academic career in Bristol, Paddington and Dublin. Williams went to work as an engineer at the Great Western Railway's Swindon works, and became Mayor of that town.

The department at South Kensington was always slow in paying teachers

the grants for their successful students. Bush, with a family to bring up, requested that he be granted a fixed salary in addition to the fees and the grants from South Kensington. After due consideration, the committee decided to award him £50 "for the current session". (46) There is no record of this action being repeated, but the committee did advance him money until the grants arrived on several occasions in subsequent years.

Despite the successes of 1875-76, the following few years were not happy or particularly successful ones. There was some student unrest, with disquiet expressed about the award of the silver medal. Mr. Stephens wrote to the committee about the matter, but the committee supported Bush in his choice. (47) Later the "Star", having noted that the annual South Kensington examinations were being held, accused the majority of the committee of laziness and ineptitude. "The rules of the South Kensington department are necessarily strict as to local supervision by the committee. It is to be regretted that the committee has taken so little interest in these examinations thus throwing upon 4 members the onus of attending each evening. Plenty of men are ready enough to have their names paraded as committee men, but when anything has to be done involving a little sacrifice, they are conspicuous by their absence. Perhaps these gentlemen will be surprised to hear that the examinations have been put in peril because of their non-attendance". (48)

The "Star" may, or may not, have been correct about the lack of ability and enthusiasm of committee men, but the committee was far from efficient in dealing with the Hewertson bequest. Mr. Hewertson, a prominent local timber merchant and shipowner, who had been on the committee at its inception, and was an ex-Mayor of the town, died in June, 1876 and in his will, published in February, 1877 he left a quarter of the residual of his estate to the School of Art and Science. This amounted to £1427-10s. The first problem to arise was which body should deal with the bequest. A meeting was held in October 1877 between the committee, representatives of the Town Council and a representative of Mrs. Hewertson. This meeting decided that the committee and

not the Town Council was the proper body to deal with the money. It was not until December, 1879 that the money was actually made available, and at this point the next problem arose - how should the money be used? A suggestion was made that £1200 should be invested in some permanent security, the rest being placed in a current account. (50) What was to be the permanent security? After six months silent thought the committee decided to offer £1300 to Newport Corporation at 5% per annum. (51) However this offer does not seem to have been accepted, for the next reference to the bequest appears a year later when the committee asked the Trustees of the Hewertson Bequest to invest the money. (52) The Trustees declined, stating that they wanted more advice from the committee before making any decisions. The committee's suggestion was that it should be put toward a building fund. (53) The following month it was decided that the bequest should be placed temporarily in the Building Fund of the New Free Library. (54) Nothing further is heard of the bequest for almost four years and the impression one gets is of quiet relief on the part of the committee that it was out of the way. However, Mr. Thomas Beynon, who as Mayor had set in motion the establishment of the Free Library, objected to the bequest being used for the building of a museum for the town. He stated that he would resign from the committee if it went ahead with such a plan. It was then proposed and accepted "That this committee have no objection to the temporary use of the Hewertson Bequest for the erection of a Science and Art Museum on land behind the present building, on the understanding that if at any future time the money should be required by this committee it shall be returned to them, and that the money should be lent to the Free Library committee at 5% interest". (55) This motion clearly emphasises the lack of foresight on the committee's part and one is amazed with the revelation made six months later that the interest so carefully mentioned in the motion was, in fact, going to the Free Library committee for it to use! (56) The matter was raised again some 18 months later when Mr. Beynon expressed his continued disquiet. He felt that what was happening

was not what the donor would have wished or intended. Mr. Beynon stated that he would like to see the Bequest invested in something else, or be applied to something more suitable to the School of Art and Science. (57) After this meeting Mr. Beynon was replaced by Mr. Newman. Again nothing happened while the committee silently considered matters for a year. The momentous decision reached was that the Hewertson Bequest should be put in the current account of the Free Library - thus ensuring that the money would gain no interest at all. (58) A year later Mr. Newman wrote to the committee asking that the Bequest be legally invested - he suggested Corporation Debenture at 3¼%. The committee decided to write to the Town Clerk. (59) A year later, he had to be reminded that the committee was still awaiting his reply. Eventually the committee decided (September, 1891) that the money, £1300, should be invested in Newport Corporation at 3¼%. (60) Thus, at the end of twelve years, the Hewertson Bequest was worth less than what it was when it initially became available. Clearly the committee members had never read the parable of the talents and the unfaithful servant! If £1400 had been invested at the beginning of 1880 at 3%, say, the Bequest would have been worth some £1940 by 1891. This failure of the committee to act in a positive manner with regard to the Hewertson Bequest must be regarded as one of the most unfortunate shortcomings of the period 1870-1891. If the money had been used wisely, in a way the donor probably intended, further education in the town would have been undoubtedly developed to better effect.

Meanwhile classes continued at the School of Art and Science. There appears to have been one of the periodic recessions in trade in the town during 1877 to 1881 and during this time interest in the classes seems to have waned. The prize giving in 1878 (held in March) was poorly attended, (61) and the following year it was not held until the end of April. At this time the Secretary resigned, and it is noticeable that from that time the minutes of all committee meetings are in the minute book. How much blame can be attributed to Mr. W.N. Johns for the lack of organisation is difficult to say,

but inefficiency on the part of the secretary must have hindered the progress of the work to some extent.*

The question of accommodation was brought to the fore in 1879 when the Conservative Association, which owned the Savings' Bank Chambers in which the classes were held, demanded £60 rent per year for use of the Chambers. This was more than double the previous amount and the committee rejected the demand, deciding to look for other accommodation. + (62) The committee also decided to keep a closer watch on the work of the school and asked Bush to present a monthly report.

The problem of accommodation was pressing and it was decided to rent rooms on Stow Hill from Benjamin Evans.⊖ Unfortunately, the rooms not being ready in September, the committee was forced to go back to the Conservative Association and ask them for the use of the Savings' Bank Chambers for another quarter (63) (presumably at the higher rent).

1878-79 was not a good year for Further Education in Newport. When the examination results appeared Bush expressed his disappointment to the committee which agreed to write to the department at South Kensington, requesting that the papers be looked at again. A month later the reply came that there had been no mistake. Perhaps as a result of this the committee decided to appoint visitors from its members to inspect the work at the school. It appears that these inspections took place every evening. (64) Her Majesty's Inspector who visited the school in November, 1879 was far from satisfied with what he found.

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*One must say in defence of Mr. Johns that he was a very busy man being Editor and owner of the "Star" and that he always supported the School of Art and Science to the full.

+The Souvenir Booklet issued on the Opening of the building in Clarence Place in 1910 states that the move was dictated by an increase in student numbers. This was not the case; student numbers had fallen. The reason for the move was the increase in rent.

⊖Mr. Evans, an ex-Mayor of the town, was on the committee at the time of this decision.

Mr. Iselin, in his remarks to the committee, "expressed his surprise at the elementary character of the work being executed by the students generally that evening and expressed his doubt as to whether the teacher was able to do the Art subjects full justice, while also having to teach Science subjects. He thought. too, the Day School, having only 2 or 3 pupils was very unsatisfactory for a town of the size and position of Newport". He was also dissatisfied with the science equipment at the school. (65)

The committee was not happy with this report and did take some action. Equipment for the teaching of Magnetism and Electricity was bought for £5-3s-6d.) (66) When South Kensington refused to give a grant towards Physics because of the poor state of the Physics equipment in the school, the committee promised to put the matter right. (67) The committee rejected Mr. Iselin's full report when it became available. and decided to write to South Kensington to say that the equipment had been bought. (68) It seems strange, however, that all the other points brought out in the report appear to have been ignored.

With the prospect of new rooms becoming available for the School in the New Year (1880) it was decided to send a delegation of the committee to look at the Glousceter School of Art and Science. The delegation of Mr. C. Kirby, Mr. Benjamin Evans and Mr. W. Bush, reported to the meeting on 5th December, 1879. They first described the School at Glousceter - they waxed eloquent on the Art facilities (some 38 lines of text), but Science merited a mere paragraph of four lines. This bias was reflected in their recommendations. Those for Art took well over a page in the minute book, but on Science the report stated "with respect to Science classes they might probably be held for some time in the back room until some other arrangement could be provided as by taking the adjoining rooms over the Government offices, if the number of students hereafter make this desirable". (69) Such was the importance the committee and the teacher placed on Science classes in the School of Art and Science in Newport in 1879.

The committee seems to have been determined to make the classes in the new rooms a success. They had 1000 circulars about the new rooms and classes printed (70) and these were distributed throughout Newport. There was a definite response for at the end of January, 1880, it was reported that the number of day students had increased to 20. (71) Organisation improved, too, for the prize giving was held early in January. There were, however, complaint about the award of medals. It had been decided to award three silver medals for 1878-79 and no bronze medals. This did not please some of the students and led the committee to decide that there should be a systematic method of deciding which students should be awarded medals. (72)

As this time there appears to have been some ill-feeling between the committee and the teachers. In April, Mr. Cock, the science teacher, offered the committee some apparatus he had been able to buy at Pill. In his offer he stated that he hoped that he would be given something towards the cost. The committee accepted and stated that it would consider the question of a grant later. (73) A month later Mr. Cock was offered £3 towards the equipment which had cost him £6. (74) Perhaps he was not happy with this, for a month after the School re-opened in August, 1880 it had not been decided which Science classes to arrange. (75) However it seems that he did teach science classes again and in the following summer he asked the committee that he be given a small fixed salary, but the committee postponed making a decision. (76) After the Christmas holiday he complained that his classroom was not available on the first evening of term, and he informed the committee that he was resigning forthwith. The committee asked the Secretary to approach Mr. Cock with a view to re-starting the Science classes again under his direction. (77) Cock, however could not be persuaded and disappeared from the further education scene in Newport as did so many other faithful servants in future years.

Bush, too. was having his problems. When an Inspector visited the School during the examinations, he found that worked problems had remained on a blackboard during the examinations. The committee wrote a letter of explanation

to South Kensington, but it is clear that Bush was held responsible. (78) Later in the year Bush asked the committee for an advance on his fees (the department at South Kensington continuing to be very slow in paying the grants but the committee turned down the request. (79) Later in the same month his name appeared in the list of local liquidations. (80) It is quite possible that this embarrassment could have been avoided if he had been given an advance.

Bush and the committee disagreed again in September. First he was cautioned about work he had had done which had not been sanctioned by the committee. Secondly, when he requested to be allowed to teach photography in the science syllabus he was told that he could go ahead "provided that Mr. Bush has most of the necessary equipment and that little or no additional expense would be incurred". (81)

Matters came to a head early in 1881 when the committee minutes record, "Before commencing business attention was called to the fact that Mr. W. Bush, Art Master, had taken a seat at the committee table, whereupon he (Mr. Bush) claimed a right to sit at the Committee, he being returned by the department as an officer of the schools, in like manner to the Chairman and Secretary. The Committee failed to see that he had any right, but permitted him to remain on condition that he withdrew his claim to sit". (82) This action by Bush must have come as a surprise to the committee, but since several items discussed at this meeting concerned Bush and his finances, it could be argued that he ought to have been invited to attend. It seems that it was several years before he sat on the committee again (and this time by invitation) after a marked improvement in his relationship with the committee.

During this meeting (January, 1881) Bush claimed the £10 which South Kensington gave for secretarial work. This had always been paid to the Secretary of the Committee (25/6/72 11/11/73, 19/6/75, 17/9/76 etc.) and the committee rejected the claim at their next meeting as unjustified. (83) It was noted that a grant of £15 had been received for the Pupil Teacher

Miss Hawkes, but she had only received 1s-6d in the pound. The committee urged Bush to pay up in full. Another complaint against Bush was that on 19th January, 1881 when a surprise inspection of the school by Major-General Goddard, H.M.I. was carried out the registers had not been filled in. (82) Clearly Bush was at fault - he always seemed to have trouble with registers.

During the whole of this incident Bush does not appear in a very favourable light. Certainly he was having financial difficulties (probably due to the delay in receiving grants from South Kensington), but it can be seen from records of the Department of the time that Bush was teaching in at least two other places in Monmouthshire, so that his income from South Kensington alone must have been in the region of £150 to £200 per year. He also gave lessons to private pupils. Thus his total income must have been fairly substantial for the time.

A month later Bush was asking the committee for a second Pupil Teacher. (84) This request was refused, but later it was agreed that Miss K. Wells should be engaged on condition that Bush paid her if not enough work were done to obtain her grant from South Kensington. (85) Miss Hawkes' salary was increased to £18 per year in September as she was teaching five evenings per week instead of three as previously. (86)

This year (1881) the committee decided to advance Bush the Art grant until it arrived. Bush, in his turn, offered to teach Chemistry classes but this was turned down due to lack of accommodation. It should be noted that the Art grant was double the size of the Science grant, indicating the proportion of the work done in the two subjects in the school. (85)

In September, 1881, the building of the New Free Library was started in Dock Street. This was described in a very long article in the "Star". It included a detailed (and not very accurate) description of the Newport Athenaeum and Mechanics' Institute and how the Free Library evolved from it. It concluded, "We must not omit to mention that a very valuable adjunct to the institution (the Free Library) was started in the shape of a science and

art school .... This new building in Dock Street, we are pleased to say, will furnish ample accommodation for this branch". (87)

During 1881-82 there is the occasional minute which suggests that Bush and the committee were still not in complete accord. In March, 1882 Major-General Goddard again found fault with the registers when he visited the school. Bush was asked to make sure that the short-comings were rectified. (88) In September 1882 he eventually agreed to the committee's terms for the employment of a second Pupil Teacher. The minutes went on "Some observations having been made to the effect that insufficient attention was given to advance students and that the classification of many students as "industrial" was not strictly accurate, the Chairman iterated to Mr. Bush the observation which had been made, and expressed a desire that in the ensuing session he would so arrange as to devote the whole of his time during school hours to the students in attendance". (89) What caused this sharp rebuke we can only guess, but Bush was awarded a Bronze medal and £5 from the City and Guilds Institute on the results of the 1882 examination in printing. Perhaps this had taken up too much of his time.

In November, 1882 the new building for the Free Library and the School of Art and Science was opened by the Mayor, Mr. Thomas Beynon (this was very appropriate as he had been the prime mover to start a Free Library in 1870). The occasion was marked in Newport by a public holiday, for not only was the Free Library building opened, but also New Street and Dock Street, and additional wards at the infirmary. There were public processions and demonstrations and a dinner held in honour of the Mayor. The "Star" gave the occasion well over a page, but the School of Art (the words "and Science" were not included) provided a mere 25 lines. (90)

The classes moved to the new building on Wednesday, 22nd November, 1882. Perhaps as a result of the move the committee received two letters asking for Chemistry classes. Bush stated that he was qualified to teach such a class and would do so the following session, but he felt the present session was too

advanced to start a class at that time. (91) Early in the New Year a request was made to start a Navigation class as the Board of Trade examinations were held in Newport. (92) The request was not acted on then, but such a class was started in 1886.

Again during this period Bush's behaviour is difficult to understand. In February, 1883, there was the annual complaint about slackness in the registers. Miss Hawkes resigned at the end of the session, and by July Bush was proposing to teach all the classes. The committee told him that this was impossible, so he agreed that Miss Wells should remain. (93) Yet within three months he was asking for a second Pupil Teacher again (and he was willing to be responsible for her salary) as classes were overflowing. The committee agreed cautiously (94) and Miss James was appointed at £12 per year.

The "Star" reported the prize giving in December and in an editorial wondered if the School was fulfilling its proper function. It suggested that it would be better if there were more of the workers there and fewer young ladies. (95) One doubts, however, if the workers in Newport knew very much about the School of Art and Science anyway. It is clear that they were going mainly to other classes being run in the town. There were, for example, classes in the evenings at the National School. The "Merlin" reported in February 1882, "These classes have for another session been brought successfully to a close". (96) There were 70 students at the classes that year which compared very favourably with the reported 126 students at the School of Art and Science. (97) These classes were again mentioned two years later when the report states that they had been running for ten years. The following year the "Star" gave more details. "The evening classes in connection with the National Schools, Commercial Street, have now been started, and a goodly number of lads and young men have presented themselves for admission. These classes have been carried on by the headmaster and his assistants during the past eleven winters and have been attended with great success. During this period considerably over a thousand young men have been admitted and a large

proportion of these have from time to time been presented to Her Majesty's Inspector for examination in the subjects taught, and good results have always been obtained. These classes are very useful to lads who have not passed the upper standards when in the day school. The examination takes place at the close of the session, when all who have made the required attendances are examined. Prizes and certificates are awarded to the successful ones and they are also invited to the breaking up tea and entertainment". (98) This work continued to expand and thrive until absorbed into the School of Art and Science in 1895, as will be seen in the next chapter.

Clearly these classes should have been a vital link between schools and the School of Art and Science, but Bush saw their growth as a threat to his livelihood, for when the School Board wanted to start an Art class in the schools in connection with South Kensington, Bush wrote to the Press. He claimed that there was no one employed by the Board qualified to teach such a class. (99) The Clerk of the School Board stated that there was one head-master with the necessary qualifications and unless Bush was "ready to withdraw his letter and make the usual apology" he would sue Bush for libel. (99) Bush was sued for libel by Mr. T. Davies, Headmaster of Bolt Street School, in connection with this qualification issue in February 1886 and the verdict went in Bush's favour. It is clear that such accusation and counter-accusation and resorting to law did nothing to help further education at any level in Newport. No one comes out of the incident with credit, particularly Bush.

The year 1884 was a quiet one for the School of Art and Science, the most notable event being the commencement of classes in shorthand in August under Mr. Beel. This was the start of commercial education in the town. Twelve students attended the elementary class and four the advanced class. The fee was 2s-6d per month. (100)

Meanwhile relations between Bush and the committee seemed to have improved It is difficult to pinpoint the reasons but we do note that Bush was continuing

his studies and gained some notable awards in national examinations. In 1884 he was top out of 700 candidates in Mechanical Engineering with City and Guilds and was awarded a £5 prize. The same year in the South Kensington examinations he was placed first out of 1,998 students in Theoretical Mechanics and was awarded the medal for this subject. (101) It would appear that he took these examinations to enable him to teach Mechanical Engineering, for at the beginning of the next session numbers were up in this subject and he was asking for more apparatus. However, as South Kensington would pay only 25 per cent of the cost of this equipment, the committee asked Bush "to cut down the list if possible". (102) A similar fate awaited the request for more science apparatus. In this case a grant of 50 per cent was available, but Bush was again asked to cut back. (103)

Little of note happened in 1885 at the School. Newport Pottery Company suggested that a class in Clay Modelling and Colour Decorating should be started, (104) and it was agreed to give it a try. The committee was also asked if it had any objections to an evening class in Science being started in one of the School Board's schools. The committee decided that it would be better if classes for adults were under its control, and the Secretary was asked to see Mr. T. Davies with a view to him teaching such a Science class at the School of Art and Science. (105)*

Bush had again taken examinations in 1885 and was very successful once more. In navigation he won a medal for honours and in electro-metallurgy he was awarded a medal and £5 by City and Guilds.

In January, 1886 it was decided to start a class in Navigation with Mr. White of Bristol taking a day and an evening class. (106) This commenced in February together with a class in Marine Engineering. (107) Unfortunately both classes were closed in July when Mr. White gave up the appointment, the reason given being a slump in shipping. (108)

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*The Secretary went to see the wrong Mr. T. Davies, but the correct one did agree to teach the class.

It would appear that the examination results were not very good this year as, after the results were announced, Mr. Price proposed at a committee meeting "that a Committee be set up to examine the condition and working of the Science and Art Classes, giving particular attention to the sufficiency and suitability of the staff of teachers, and their qualifications for their positions, and to report thereon". (109) Mr. Price expressed the belief that discipline was bad, and that Bush was too occupied, as shown by the timetable, to do justice to the numerous subjects taught both in Art and Science. Various people spoke against the motion and eventually it was withdrawn.

At the same meeting it was proposed to set up a Saturday morning class in Mathematics for teachers and this was acted upon. This class was the start of formal teacher education in the town and it continued until the work was absorbed into the Caerleon College of Education in about 1916.

Press comments on the activities of the School at this time are very sparse, perhaps very little of moment or controversy was taking place. A letter from a student, to the "Star", later in 1886 commented on a gift of £100 from Mr. Grice, the retiring Mayor. This had been given to the Free Library and the School of Art and Science, and the committee of the first worthy institute decided that it should go towards the cost of building the museum. The student felt that it would have been better spent on the School of Art and Science as there were plenty of things which needed attention. (110) As usual nothing happened and presumably the £100 went towards the museum.

There are signs that Bush and the committee were now getting on much better. Perhaps the first sign was when Bush was specifically mentioned as being present at the prize giving in January, 1886 and later in the year he was regularly attending the committee meetings. (111) This must have led to an improvement in the running of the School, as ill-feeling and controversy never help in the smooth running of any educational institute.

The only noteworthy event in 1887 for the School was, that as a result of the May examinations, W. Wakling was awarded a bronze medal from South

Kensington and a Free Scholarship for two years. (112)

Early in 1888 the most famous old boy of the School, Professor Ryan of University College, Bristol, was guest speaker at the prize giving, which caused the local press to wax eloquent on the benefit of the School to the people of Newport. (113) Both 1888 and 1889 were notable for their insignificant happenings in the School. It is interesting to note that in February, 1888 Bush had only just received the South Kensington grant for Science for the previous year and that the Art grant still had not been paid. (114) No wonder Bush sometimes had financial difficulties!

It was suggested that the Pupil Teachers were not giving of their best to the School because of outside interests. (114)* After much private thought the committee instructed them to be present every night the School was open for classes. (115)

The School of Art and Science was left £200 in the will of Octavius Morgan, brother of Lord Tredegar published in September 1888. It was received with thanks and no further mention is made of it. Probably it was absorbed into the funds of the Free Library together with the interest on the Hewertson Bequest. (116)

A reminder of the standing of the School in Art appeared in April, 1889 in the "Star". "A correspondent of the "Artist" for March in comparing the results of various Schools of Art in industrial centres, places Cardiff and Newport in the first class, ten in number, where over £1 per pupil is gained by way of grant from the Government. It must be a gratification to the Committee as well as to the master to find the results of the students so highly classed". (117)

The first mention of the "New Technical Instruction Act" appeared in the minutes of November, 1889, but it was not until the following June that it was brought up again. The June minutes state, "Reference was made to the New

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* At this time these teachers were receiving £15 per year for their work.

Technical Education Act, but as its provisions were so little understood by the Committee, the subject was postponed until the next meeting; Mr. Newman undertaking to present a report on it". (118) Unfortunately the minutes of the next meeting were not copied into the minute book so we do not know what was discussed. Further discussion was held in July, but again no decisions were made.

Three other problems arose at much the same time. First, South Kensington withdrew recognition of Miss Wells as a Pupil Teacher and the Committee was forced to dismiss her because of lack of funds; (119) then, when the School re-opened in August, numbers were far from good. Perhaps this was due to the early start brought about by South Kensington requiring a 40 week academic year; (120) fortunately numbers increased in the next month or so, The third problem was the allegations of general copying in the May examinations. (121) These were dismissed as without foundation after an investigation by the committee and clearly South Kensington had no doubts either for Walter T.G. Marsh was awarded a Whitworth exhibition on the results of these examinations.

Meanwhile people outside of Newport were concerned about the slow progress being made with regard to the implementation of the Technical Instruction Act in the town. The "Star" carried a report from the "Western Daily Press", Bristol. "Newport is a town where the adoption of the Technical Instruction Act of last year would be likely to produce satisfactory results. It possesses large engineering and other establishments, employing many young persons to whom technical knowledge is almost indispensible if they would make progress in the vocation they have chosen. As yet, however, the authorities have made little sign as to their intentions with regard to the Act. While many other towns and counties are levying rates and preparing to carry the Act into operation. Newport, unfortunately, has been comparatively idle. As the Corporation is the authority empowered to take the initiative. it is hoped they will no longer delay in taking the necessary steps to give the inhabitants the benefit from such an extension of education facilities as the Technical

Instruction Act affords .... Its need is apparent; the additional impost of a penny rate is not likely to be seriously objected to; and by the temporary utilisation of rooms at the present School of Art, work could be commenced almost immediately. We trust that at the next meeting of the Council some disclosure will be made as to what that body contemplates doing in the matter". (122)

Perhaps this article helped to stir the Town Council into action, for a Technical Instruction Committee was set up in February, 1891, with two members of the committee running the School of Art and Science, Mr. Morris and Mr. Daw, being elected to serve on it. The two committees ran in parallel until the Newport Technical School opened in October 1891. The Technical Instruction Committee and its work will be considered in the next chapter.

Meanwhile the School of Art and Science committee was asked "to consider how and in what manner the classes now carried on by them could be developed and rendered more effective and to report to the Technical Committee". (123) The committee reported in June and made the following recommendations:-

"1) that it is desirable to appoint a Headmaster with an efficient staff of Assistants;

2) that the said Master be paid by salary and devote his whole time to school work;

3) that the teaching staff should have nothing to do with the collection of fees, but that that duty be performed by a Registrar or Clerk;

4) that the Headmaster and Assistant teachers be paid a proportion of the grants earned in addition to the salaries fixed by the Committee;

5) that Mr. Bush be appointed the Headmaster;

6) that the Headmaster be paid a salary of £320, together with one-third of the grant earned;

7) that the School of Art Committee suggest the following timetable, which has been provisionally approved by them, and recommend the addition, as soon as possible, of Electricity and Physiography;

8) that the Technical Instruction Committee take over Miss Gratte and Miss Campbell, who are at present engaged in the school, and to arrange for assistants in Machine Drawing Building Construction, and Elementary Freehand and Model Drawing, Mathematics and Geometry". (124)

The Committee's final acts were to propose that a marble tablet be set up to commemorate Mr. Hewertson and his bequest*, and to hand over the responsibility of the bequest to the new Committee. (125)

Thus the second phase in the development of further education in Newport came to a close. Looking back, almost a century later, can we say that it was successful? Certainly compared with some towns, more was achieved but compared with others considerably less.

What were the main areas of success and what were the failures? There was a firm foundation laid on which to build future work, particularly in Art, in which field Newport still has a national reputation. There was a large number of local students who benefited considerably from the education they received at the School of Art and Science, some of whom achieved considerable success.

However against this must be set some of the undoubted failures. Two major areas stand out. First, the failure of the committee to use the Hewertson bequest in a manner profitable to further education in the town, in accordance with the donor's wishes. So much could have been done, a start could have been made on a new building to house the School of Art and Science by itself. This would have given Newport a springboard for higher education but the opportunity was lost over a hundred years ago just as it has been lost on several occasions since then.

Secondly, the decline of science education in the town must, to a large extent, be blamed on the teachers and, in particular, on Bush. There is no doubt that he was a talented artist, and that in this area he was able to

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*This can now be seen in the building at Clarence Place, housing the Faculty of Art and Design of the Gwent College of Higher Education.

inspire and successfully teach the students, but, despite his qualifications and successes in examinations in scientific subjects, he never seemed to inspire the science students in quite the same way. However it was not only his attitude which led to this state of affairs; almost every speaker at prize givings seemed to emphasise the importance of art with only a scant mention of science. The same attitude appeared in the Press and in the committee where the School was so often referred to as the School of Art. It would be wrong to say that the emphasis on Art after the Great Exhibition of 1851 brought about nothing good. Much of the engineering and architecture of the period was artistic as well as practical, but unfortunately, in Newport the emphasis on Art was too great, and looking back, we can say that further education in Newport became unbalanced and consequently suffered.

What was taking place nationally during this period which covered twenty of the last thirty years of the Victorian era? Trevelyan states that life for the working man was improving. The streets were safer, manners gentler, life more humane, sanitation rapidly improving, working-class housing, although still bad, was less bad than ever before. (126) Conditions of labour had improved, real wages had risen (the miners of South Wales were earning 6 shillings and 6 pence per day or 39 shillings and 4 pence per week by 1891. (127)) Working hours had continued to decrease and were down to between 52 and 57 hours per week by 1890. (128) Foster's 1870 Education Act had made primary education compulsory for all children, more and more working men were given the franchise, and movements such as the Salvation Army and Teetotalism were founded. Life was becoming more bearable for the working man.

There were setbacks with periodic times of recession which had not been experienced previously causing hardship. There were such times in 1874-79 and again in 1883-86, while the severe recession in agriculture from 1875 to 1884 caused much hardship to agricultural workers. (129) These recessions had an effect on further education as there was less money available for such luxuries as classes.

The great Paris exhibition of 1867 showed how complacent Britain had become and how far the country had fallen behind in industry and technology. (13) It also showed what slow progress had been made in technical and scientific education in Britain. Margaret Gowling, in an article in the Times Higher Educational Supplement (131) suggests that the reasons for the failure of Britain to keep up with the rest of Europe in technical and scientific education were the lack of money given to such education, the administrative structure of education, the attitudes of the different social classes, the attitude of the church and the imperial purpose of the country. She quotes David Landes "all the evidence agrees on the technological backwardness of much of British manufacturing industry - on leads lost, opportunities missed, markets being relinquished that need not have been". A Select Commission and two Royal Commissions were set up to consider the problem with the result that Lord Salisbury's Government drew up the Technical Instruction Act of 1889 which empowered local authorities to raise a penny rate to promote technical and manual instruction. (132) The implementation of this Act will be dealt with in the next chapter.

Throughout the country further education continued to develop piecemeal. In many areas the demise of the Mechanics' Institutes removed a unifying influence and the development depended even more on the whims of individuals and the generosity of the wealthy.

Brace suggests that during this period technical instruction was inhibited by employers attitudes, a basic lack of elementary education, the policies of the Department of Science and Art in giving grants only for theoretical studies and the poor pay of the workers. Some of these factors played an important part but the working class was now receiving a basic elementary education in the schools set up under the 1870 Act, and the Department of Science and Art was playing a larger role in further education than it had previously. Perhaps other major factors were the lack of money and the piecemeal approach to classes and further education in general with

very little directive from any local body wishing to take responsibility for the work. This approach is illustrated by the attitude in Gateshead where the policy was to let individuals start classes with no central organisation. (133) The result was that evening classes were held in various schools and in the North Eastern Railway Literary Institute. This Institute, founded in 1857, was registered as a school in 1876 and ran classes with some success for several years. (134) Classes ran in Art and Science from 1877 to 1882 and classes for the City and Guilds examinations existed with decreasing numbers from 1879 to 1895. (135)

In other places where a good foundation had been laid to the work and where there was a strong local interest further education prospered. In Cardiff the classes in Art and Science had been firmly established by 1870 and went from strength to strength. (136) In Huddersfield the Mechanics' Institute continued to flourish until 1884 when it became the Technical School. Over 1000 pupils were attending classes every year at these establishments. (137)

Towns where there was more vision than in Newport had been able to erect purpose-built buildings for further education. Warrington was able to build an Art School with the Department of Science and Art giving £600 towards the cost plus fifty per cent of the cost of the fitting out of the building. (138) Stockport and Sunderland were two other towns where new buildings for further education were built during the period. In Stockport there never appeared to be a shortage of money for further education, and in the late 1880's scholarships were established for further education, similar in nature to the Hewertson scholarships in Newport (see chapter 3). (139)

By way of contrast, in St. Helens and Middlesborough the work from 1870 to 1891 seems to have been run by various voluntary bodies or by the High School. In St. Helens the classes were run by the YMCA (140) and several Literary and Scientific Associations. (141) In Middlesborough the High School, founded in 1875, gradually took over the role of the Mechanics' Institute and

it was the centre for evening classes from 1885 onwards. (142)

In Newport the path further education followed seems to have been somewhere between the two extremes of no or very little guidance and direction with no financial assistance, and a firm hand, vision for the work and money to back up the vision. Thus, by 1891, there were in Newport well established fairly small classes working in accommodation which was far from suitable. But a big disadvantage Newport did have was the inability of the Committee and the teacher to work together. In none of the other towns cited is there any evidence of the friction which existed in Newport between Bush and the Committee. and whoever was to blame, it could not have helped the development of further education in the town.

Chapter 3

Progress under adverse conditions

1891 - 1910

In 1889, the Government of the day passed the Technical Instruction Act. This Act, in addition to defining Technical Instruction, gave local authorities the power to raise up to a penny rate for Technical Education. It was first brought to the public attention in Newport at the Town Council meeting in November, 1890 when Councillor T. Jones and the Town Clerk, Mr. A.A. Newman were asked to prepare a report. (1)

They reported in December on both the Technical Instruction Act and the Welsh Intermediate Education Act of 1889. They reported that the first Act defined Technical Instruction to be instruction in

"The principles of Science and Art applicable to industries;

The application of special branches of Science and Art to specific industries or employments;

The branches of Science and Art with respect to which grants are, for the time being, made by the Department of Science and Art;

Any other form of instruction (including modern languages and commerce and agricultural subjects) which may for the time being be sanctioned by the Department of Science and Art by a minute laid before Parliament and made on the representation of a local authority that such a form of instruction is required by the circumstances of the district". (2)

"Manual instruction" was defined to be instruction in the use of tools, processes of agriculture, modelling in clay, wood or other material.

The Welsh Intermediate Education Act required the setting up of a Joint Education Committee which had to enquire by 1st November, 1892 into the state of intermediate and technical education in the County Borough.* This Act allowed the local county council to raise up to a half penny in the pound on the rates.

Councillor Jones and Mr. Newman continued, "On the whole, therefore,

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*This may have been done for intermediate education and may have led to the setting up of the Boys' and Girls' Intermediate School in Newport, but nothing appears to have been done for the poor relation of education, technical educatio

and considering that Newport cannot afford to be left behind in the education race and allow neighbouring towns to get the start of her, the better course would seem to be for the Town Council to exercise the powers it already possesses and to put the Technical Instruction Act into force as soon as may be, using, or adapting any buildings or educational machinery brought into existence under it". (3)

They suggested that, as a first step, the School of Art and Science should be brought under the charge of the Technical Instruction Committee. They wished to see an expansion in the number of subjects taught. Additional science subjects should be Organic and Inorganic Chemistry, Animal Physiology, Physiography, and Hygiene. Practical subjects should be Plumbing, Carpentry and Joinery, Masonry and Stonework, Mechanical Engineering, and in addition, French, Spanish, Italian, German, Book-keeping, Shorthand, Commercial Arithmetic, Commercial Correspondence, Commercial Geography, Naval Architecture Navigation, and Nautical Astronomy were worthwhile subjects.

It was felt that the best (and cheapest) way of teaching the Science subjects would be to use the Oxford or Cambridge University Extension Schemes, or some of the staff from University College, Cardiff.

All this new work would require a big expansion of facilities. The requirements would be a lecture theatre capable of holding 250 people, a School of Art with four or five rooms, two laboratories, at least three workshops and an unspecified number of classrooms. It was obvious that the present accommodation was inadequate and it was suggested that a building should be erected near the Temperance Hall, or opposite the Town Hall in Dock Street.

The estimated income from all sources (not specified) would be about £1000 per year and it was thought that it would be spent as follows:

Present Science and Art classes	£100
Interest on £4,000 for the building	£160
Interest on £2.000 for furniture and building	£100
Balance for building up existing work and new subjects	£640
	£1000

It was hoped that the land for the site would be given free of charge.

Finally Councillor Jones and Mr. Newman suggested that Technical Instruction should be run by a committee of ten, five from the Town Council, and five from outside bodies, to be known as the Technical Instruction Committee. (3)

When the proposal to put the Technical Instruction Act into effect in Newport came before the Town Council there was a move to have it deferred. This amendment was defeated 10 for, 17 against. (4) This was the first skirmish in a long and bitter campaign against Technical Education in the town which was really aimed at removing Bush. As will be seen later the war went on for more than seven years and the major casualty was Technical Education itself.

The Council decided that the Technical Instruction Committee should be made up of six members of the Town Council and four from outside bodies, viz. one from the Newport Trades Council, one from the Chamber of Commerce, one from the Free Library Committee and one from the Newport School Board. (5) This committee was increased by the addition of two members of the School of Art and Science Committee and a representative of the Newport Branch of the National Union of Teachers. (6) The first Technical Instruction Committee was Councillor T. Jones (Chairman), Councillors Goldsworthy, Lloyd, Howell, Canning and Wheeler, W.A. Baker (Chamber of Commerce), R.T. Martin (School Board), W.N. Johns (Free Library), E. Perman (Trades Council), J.C. Brooks (National Union of Teachers) and L.L. Morris and H.L. Daw (School of Art and Science).

At its first meeting the committee was informed that there would be £500 available (of which £350 was for Bush's salary). It also approved the list of subjects to be offered. A letter from Mr. T. Davies, Hon. Secretary of the Newport Board Teachers Guild, requested that the Guild be granted representation on the Technical Instruction Committee as the Guild had been running a Technical Centre at Bolt Street School for several years. Some 150 students attended for classes in Chemistry, Mathematics, Practical Geometry

Electricity, Machine Drawing, Telegraphy, Electrical Engineering, Mechanical Engineering, Brewing, Breadmaking, Freehand and Model Drawing. (7)* The committee took note of the letter, but a decision on the request was deferred, which, in fact, meant that it was never accepted.

The proposed classes had been advertised (how is not revealed), and on the evidence of the interest shown it was agreed that classes should be started in Chemistry (nine prospective students), Carpentry and Joinery (seven), French (seventeen) and Shorthand (thirteen). It seems strange that numbers collected in February for classes to start probably in September should have decided which classes should run.

The committee was energetic in its attempts to obtain suitable accommodation. They looked at many buildings and eventually decided to rent an old grocer's shop at 182, Dock Street for workshops, classrooms, etc. for £50 per year. (8) This was far from meeting the requirements, as soon became apparent, and although a move was made to Bridge Street in 1898, the problem was not solved until the New Technical Institute was opened in 1910 in Clarence Place.

During the months preceeding the opening of the new classes the committee met frequently to make arrangements to ensure that the classes would run smoothly. It made grants to the Oxford University Extension Scheme to help finance the new work in science; it approved plans from Mr. Thompson for a Chemistry Laboratory at a cost of £85 and paid him £5 for his effort; it made arrangements for classes and appointed teachers. In April Bush suggested that he should be a member of the committee but was told that he would be asked to attend when required. (9) When the proposals from the committee of the School of Art and Science (see previous chapter, page 96) were presented they were accepted except for number 7 which was deleted. Also Bush's salary was raised to £350 per year plus one-third of the grant earned. (10)

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*These are the classes referred to in the previous chapter; they came under the Technical Instruction Committee in 1895.

Perhaps the most important matter the committee had to consider arose in July, 1891 when the Technical Instruction Committee of Monmouthshire asked if co-operation were possible in the appointment of a sub-committee to consider matters of common interest. (11) The Newport committee declined to become involved. At the time the suggestion probably appeared to be a fairly trivial matter, and it is easy to look back almost 100 years later and condemn the committee for its attitude (which was to persist for many years to come) and its lack of foresight, but one does wonder what could have been achieved if County and Borough had co-operated. Perhaps many of the difficulties afflicting further education in Gwent at the present time would not have arisen.

In August the committee arranged to have 5,000 prospectuses and 200 posters printed and appointed the following staff for the year:

Miss P. Gratte	Art	£35 per year
Miss E. Campbell	Art	£20 per year
Mr. G.R. Thompson, B.Sc.	Chemistry	£14 per term
Mr. P. Howard	Machine Drawing	£10 per term
Mr. J. Cox	Freehand, Model and Modelling in Clay	£10 per term
Mr. F.W. Johns	Elementary Mathematics and Geometry	£10 per term
Mr. G.W. Derrick	Building Construction	£10 per term
Mr. E. Pernam	Plumbing	£10 per term
Mr. C.H. Reed	Carpentry	£10 per term
Mr. D. Conta	French	£10 per term
Mr. D. Connor	Shorthand	£10 per term

(12)

The "Star" printed an article about the Newport Technical School just before it opened. It listed the classes, and reported on the excellence of the teachers. "The new institution starts under favourable auspices, the committee having taken over the old-established School of Science and Art, which under the very able direction of Mr. W. Bush, has earned the reputation

of being ranked among the ten best in the Kingdom. They have also fitted up for practical purposes No. 182 Dock Street, where Chemistry, Carpentry, plumbing and several other subjects will be taught. (13)

Despite the large number of students who enrolled (237 by 22nd September, 1891 (14)) there was some friction and unrest. A letter in the "Star" from "Demollery" defended Bush whose qualifications had been questioned by Alderman Moses. "Demollery" stated that Bush's qualifications were of the highest order and it was quite clear that the Alderman had never been inside the School of Art and Science (in fact he claimed that Moses had stated he would not recognise Bush if he met him). (15) What Bush did to antagonise various powerful members of the Town Council is not clear, but perhaps there is a clue in a letter which appeared six years later when Bush was again in the middle of a controversy with various powerful Town Council members. "A mechanic" wrote, "Perhaps some would think more of him if, instead of interesting himself in ornithology, he spent his own time shooting pheasants, and dressed in riding breeches, and did the heavy with some of our swell folks; but working men prefer him as he is, and admire him for what he is" (16)

The large numbers caused some problems. The Chemistry classes were particularly popular so that the teacher asked for more money and equipment. The committee, however, in its wisdom, did not think it necessary for those taking elementary chemistry to do practical work. (17) Despite the difficulties, the first year under the new committee seems to have been quite successful with, by the end of the year, 370 students having enrolled for classes.

Early in 1892 Bush put forward a suggestion that a competition be held to award two scholarships to each elementary school in the town for Art tenable at the School of Art for one, two or three years. (18) The plan was accepted and the first twelve scholarships were awarded later in the year. Eight of the twelve scholarship holders had their scholarships renewed for a second year because of their good examination results.

Trouble again flared during the summer of 1892. There was friction between Bush and Councillor T. Jones (Chairman of the Committee). Allegations (unspecified in the minutes) were made about Bush's report and Jones claimed that he had seen Bush's name in official documents as a teacher at Cwmbran, Risca and Machen. (In fact, he was correct in this). Bush replied that he had given up these classes some time previously. (Again, Bush was stating a fact). (19) However, feeling was running so high that both Councillor Jones and Councillor T. Canning (the Vice-chairman) resigned. A sub-committee was set up to look into the allegations against Bush. In its report it was stated that no evidence could be found against Bush, and that he and the rest of the staff got on well together. The students, too, had supported him, 130 of them signing a letter which stated that they held him in high respect and esteem. (20)

Councillor Wheeler took over the chairmanship of the committee and the affairs of the School seem to have run smoothly for the next two years or so. The minutes of this period give a very sketchy picture of what was going on as most of the work was being done by the Executive and Finance sub-committees whose minutes were not submitted to the Town Council, and have not been traced. However recommendations did come forward. For the 1893-4 session the Executive sub-committee recommended that the French class should be discontinued and classes start in Navigation Book-keeping and Arithmetic, and Magnetism and Electricity. (21) In September, 1893 a conversazione was held when teachers, the committee and friends of the Institute met. Councillor Canning gave a lecture on the History of Art which was followed by a concert of music and recitations.

Progress continued slowly but steadily under conditions which were far from favourable. A Saturday morning art class for teachers was started in December, 1893. (22) The committee was aware of the problems which faced the Institute and passed the following resolution, "This Committee, recognising that the facilities existing at the present schools under their control, are

inadequate to meet the requirements of an extended system of Technical Instruction, deem it desirable that the Executive sub-committee inquire fully into the matter and report to this Committee at an early meeting". (23) The students, too, were not satisfied with things, particularly the accommodation. "A lady student", in a letter to the "Star", urged that something be done as it was freezing in winter! (24)

The Executive sub-committee reported in May, 1894. The present position was reviewed:- at 182 Dock Street, classes were being held in Carpentry, Plumbing, Shorthand, Chemistry, and French (it appears that this class ran during 1893-4 despite a previous recommendation). The Carpentry class was a failure, the French class was dwindling away and it was recommended that it should be discontinued in the following session, but Chemistry and Plumbing were popular classes with large numbers wanting to join them. Unfortunately the accommodation was such that some who wished to attend were unable to do so. At the Free Library the Art work had progressed in a satisfactory manner despite the fact that all the accommodation available for it was not adequate for the numbers.

The Committee recommended that, in addition to subjects already being taught, another 25 or so subjects should be added. These ranged from Practical Geometry to Ambulance work for men, and for the women it was suggested that extra subjects should be Cookery, Laundry Work, Dressmaking, and Nursing. The Committee emphasised that the present accommodation was not good enough, particularly for the practical work. This practical work was not to teach a trade "but the Committee held that theory can be more effectively impressed if judiciously exemplified in practice". (25)

"Since the formation of the Technical and Science and Art Classes, they have carried on their work without seeking assistance from the rates, but the Committee find that the funds now at their command are totally insufficient for future effective work, and that it is their duty to seek from the Council and from the rates, to augment their resources, so as to produce extended and

more satisfactory results. It may be added that Newport is almost the only town in the Kingdom, where Technical Instruction is in operation, which does not receive aid from the local rates". (25)

The Committee then examined the existing position in more detail. At the Free Library there were 28 classes per week, three during the day and 25 in the evening, with a total of 207 students. For this there were available only one small and four large rooms. At 182, Dock Street, where there were 40 students, there was only sufficient room for nine in the practical chemistry class. It was pointed out that the Art and Science School had been running from 1873 and during its 21 years existence there had been 1,853 students, who had earned £2,817 in grants. The local Council had never given any financial help to the classes, but for the present year with an income of £1,019 and an expenditure of £1,136 help would be needed.

"In the event of the County Council exercising its powers to levy a rate of 1d in the £ (amounting to £1 100 per annum), in accordance with the Technical Instruction Act, 1889, your Committee would suggest that a site be at once acquired, and new buildings be erected, with suitable accommodation to carry on Art, Science, and Technical Schools in their highest efficiency".

"The cost of the land and the building your Committee estimate at £7,000. The annual repayment of a loan for that sum, at 30 years' purchase, would be £374-13s, interest and repayment; and £725-7s would remain towards plant, material, additional staff and sundry charges.

Your Committee would call particular attention to the fact that the County Council of Cardiff, of Glamorgan, of Monmouthshire, and local authorities in all the great centres of Industry throughout the Kingdom are levying a rate in aid of their Technical Instruction Schools* and your Committee consider it imperative on the County Council of this Borough to grant the Technical School the same assistance in order that young men of this Borough should receive such educational advantages as would enable them to

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*The Committee added a footnote listing 81 authorities giving rate support.

compete favourably with those of the neighbouring towns and districts. (25)

This was a far-sighted and well-argued report, but it did raise the question of financial support from the rates. Consequently when it came before the Town Council on 10th July, 1894 it was proposed that it should be received but not adopted and this proposal was carried 21-6.

It is worth recording the actual voting on this motion as it contains some interesting facts. Those who voted for the proposal were the Mayor (Councillor F. Phillips), Aldermen Davis, Lyne, Bear, Vaughan, Councillors Jones, Sanders, Pugsley, Richards, Greenland, Brown, Morgan, Dunn, Cordey, Llewellin, W.C. Phillips, Linton, Wilkinson, Williamson, Tapson and Llewellyn. Those who voted against were Alderman Hoskins, Councillors Goldsworthy, Howell, Canning, Wheeler and Liscombe. Of those who were for the proposal (and against the plan) F. Phillips, Brown, and W.C. Phillips were, in fact, members of the Technical Instruction Committee and Jones had been the first enthusiastic chairman of the committee. It is little wonder that Technical Instruction in the town at this time had such a struggle if this was the attitude taken by some members of the organising committee.

After this set-back the committee was forced to trim expenditure, including the cutting out of the class in Magnetism and Electricity. However, it was proposed to open branch classes in Elementary Art. (26) A new Technical Instruction Committee was formed in September, made up of 23 members of whom nine were Council members. Its first task was to consider Technical Instructior throughout the town, taking over responsibility for all technical education, including the classes at Bolt Street and Maindee which had been run by the School Board.

The Committee was expected to take on these added responsibilities with no financial assistance from the Town Council. The "Star" noted that of 110 towns receiving "whiskey money", 93 of them were devoting all of it to technical education. (27) The implication in the article was that Newport was one of the 17 towns not doing so. In fact it was suggested later that a

considerable amount was spent on a more prestigious project, the setting up of the Intermediate Schools.

The"whiskey money" was an unexpected windfall for technical education. Before 1890 the only aid for technical education came from the Department of Science and Art at South Kensington in the form of grants for results achieved. (28) Under an Act of 1855 local authorities were permitted to raise a penny in the pound rate for, among other things, Schools of Science and Art, but very few local authorities did. (28) Newport certainly paid nothing to the School of Art and Science in the town from the rates. The 1889 Act permitted a levy of one penny in the pound to be raised specifically for technical education, but again few authorities implemented this immediately.

The "whiskey money" became available from surplus funds from the Customs and Excise Duties, originally intended to compensate publicans who lost their licenses under the government's plan to reduce the number of public houses. (29) In the financial year ending 31st March 1891, £740,376 had been paid to local authorities in England and Wales. By 1900 this had risen to £1,028,001. It was, in fact, from 1890 to 1902 the chief means of support of Technical Education, without which Technical Instruction Committees would not have been able to function. (30)

This money was distributed between authorities "like the probate duty under the Local Government Act of 1888". (31) No reference was made to the educational needs of the different authorities, nor was the size of the population taken into account. It depended on such things as the grants in 1888 for the poor-law medical officers, poor-law school teachers, pauper lunatics, main roads and so on. (31) As a result County Boroughs such as Newport did less well than the Counties. (32)

Not all authorities spent all (or even any) of the money on further education, for, according to Gregg, the money was given for Technical Education or as a relief for the rates to be used at the discretion of the local authority. In London, the County Council received £342,000 from the

"whiskey money" fund between 1890 and 1892 and none of it was spent on Technical Education, in 1892 £29,000 was spent on Technical Education out of £200,000 received, but by 1902-03 of £200,000 received £180,000 went on Technical Education. (33)

In Newport it is not clear when any of the "whiskey money" was paid towards the cost of Technical Education. It would appear that 1895 was probably the earliest date. Later it is almost certain that the new and more prestigious Intermediate Schools were receiving some of this money. The local authority had a duty to keep down rates, but it also had a duty to spend money on Technical Education. This in Newport was done with reluctance, too little and too late.

It was the question of finance which brought about the next series of battles between the Town Council, the Technical Instruction Committee and the Press. At the February 1895 meeting of the Town Council, Councillor Llewellyn asked what the Principal (Bush) did for his £350 per year. Councillor Brown suggested he did nothing*. (34)

The Committee put in a request for £100 to enable the classes at Pillgwenlly (Bolt Street) and Maindee to continue. The "Star" reported very fully the Town Council meeting at which this was discussed. The meeting clearly deteriorated into an attack on and defence of Bush. "Alderman Jones asked what the headmaster - he believed they did not call him that now - he called himself director of technical instruction in Newport - received as salary". Councillor Howell replied that Jones knew perfectly well what Bush received, as he, Jones, had fixed it with Bush when the Technical Instruction Act was first introduced in Newport. Bush's salary was £350 plus one-third of all grants received.

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*For some reason Councillor Llewellyn seemed to have a personal vendetta against Bush. Llewellyn was the Official Receiver in the town and seemed to regard himself as guardian of the public purse and an authority on all matters monetary. It is ironic that he himself was declared bankrupt in 1905 with debts of almost £20,000.

Jones stated that he could remember no such thing. He claimed that he had never had anything to do with Bush until Bush had accused him of trying to get him out of the job of headmaster. He had wanted no such thing and would have liked to have worked with Bush*

The question was asked what Bush actually did for his salary. Howell replied that "Bush took the plane and solid geometry class twice a week, he prepared the lectures and work of the classes, and personally directed the studies of the whole school". This did not satisfy some members of the Town Council who continued to attack Bush. Howell again defended him; Bush had built up the work for over 21 years, had earned grants of over £2,000 and the Council had never paid a penny to help. "How did they treat their servants who had been in their service for 20 years? Did they say "We can get a cheaper man than you, you can go adrift?" He asked the Council to look at the grant earned per student, 12s-5d., which was more than any other local school and then compare Bush's salary of £420 with that of other headmasters. At Cardiff the salary was £600, at Ludlow £350, and at Brighton £400. Clearly Bush was not being overpaid.

Howell then took some of the critics to task. Alderman Jones had served twelve months on the committee and left in a huff after words with Bush. Councillor Llewellyn was on the committee, but had attended only twice in the previous six months; Councillor Brown could have been on the committee, but he was not prepared to serve on it.

Eventually after all the personal in-fighting, it was stated that if the £100 was not granted the classes at Pillgwenlly and Maindee could not continue. The Town Council's decision was to refer the matter back to the Technical Instruction Committee. (35)

The "Star of Gwent" was not amused by the Council's attitude. "The unsympathetic bearing of the Borough Council towards technical education is

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*Jones as an ex-chairman of the Technical Instruction Committee, did not come out of this exchange favourably.

incomprehensible, and scarcely creditable to them as a body of intelligent gentlemen. They are responsible for having adopted the Technical Instruction Act and for the appointment of a Committee to carry the Act into effect; yet they so little regard the efforts of their own committee and the beneficial results of the Act that they decline to spend a single penny of the ratepayers' money in fulfilling its objects, while at the same time they freely vote thousands of pounds for such fads as an infectious diseases hospital and electric experiments. Mr. Howell, chairman of the Technical Instruction Committee, at the Council meeting, asked for £100 in order to defray the expense of carrying out branch classes at Maindee and Pillgwenlly, and made out a strong case for his application. There was not a member of the Council courageous enough to oppose the application on the ground that technical education was extravagant, or in any way unjustifiable, but Councillor Llewellyn insinuated that the funds at present at the disposal of the Committee were not properly applied. The observations made by him to this effect were less a condemnation of the Committee's wisdom than a censure upon himself. As a member of the Committee he has had every opportunity of acquainting himself with its proceedings. If he has neglected his duty, or has no sympathy with the good work the Committee desire to promote, his best course is evidently to retire and make way for another gentleman who will more faithfully and efficiently discharge the duties required of him". (36)

The editorial then dealt with Alderman Jones. As a former chairman of the Technical Instruction Committee he knew full well on what the money was being spent. It was hypocrisy for him to ask the questions he was asking. It was clear that his sole aim was to belittle Bush. "The Council will .... see that they are being led astray, and that by the red herring of expenditure, they are being made the catspaw for the indulgence of private spleen". The Principal's salary had been fixed on appointment, and he was doing even more now to earn it. Bush was an exceptionally well qualified man, both in art and science, and there could be few men like him in the country.

The "Star" concluded by suggesting that the work of the students must be affected by the present unrest and that the Council would do well to compare the results and salaries in Newport with those in other towns. The Council was doing the town and its young people an injustice by its attitude and it should justify its refusal to give money from the rates for Technical Education. (36)

Two weeks later the "Star" published a letter the Staff of the Technical Schools had sent to Howell.

"We, the undersigned members of staff at the Newport Technical Schools, desire to thank you for the very able manner in which you advocated the claims of our schools upon the town at the recent meeting of the Borough Council ....

We especially thank you for the way in which you stood by our Principal, Mr. W. Bush, for in so doing you defended us who have unabated confidence in him and for whom we have the deepest respect.

We remain, sir,

Yours very respectfully

Geo. R. Thompson, F.C.S. etc. (Chemistry and Electricity)
Isaac Cox (Art Assistant)
H.T. Rees (Art Assistant)
Philip Howard (Machine drawing)
George A. Derrick (Building Construction)
Pauline Gratte (Art Assistant)
Ethel Campbell (Art Assistant)
W.W.F. Pullen, Wh.Sc., A.M.I.C.E. (Mathematics and Engineering Subjects)" (37)

The battle continued to rumble on. Attacks came from quarters from which one would have expected support. Rev. H. Abrahams, a member of the Committee, stated that he would not think of sending his own daughter to the School under the present system of management. (38) Some members of the committee obviously

did not agree with this; for example the daughter of Mr. W.N. Johns*, Lilian, had been a pupil in the school for several years and had been placed sixth out of 5,381 in the country in the examination in shading from cast. Rev. Abrahams' remarks caused several letters to be written to the Press in defence of Bush, and the Technical Instruction Committee itself called upon Abrahams to justify his remarks.

At the Town Council meeting in May, 1895 the Committee formally requested a half penny rate for Technical Education. Howell again put forward a very strong case. Newport, he stated, was earning half as much as Cardiff in grants but Cardiff was spending ten times as much on Technical Education. The previous examination results demonstrated that the Newport school was second to none. Councillor Brown moved an amendment that the half penny rate be refused and the Committee be instructed to re-organise the school and staff with a view to saving money. Councillor Eeles seconded this with eager support from Councillor Llewellyn. The amendment was defeated 15-20 and it was agreed to grant the rate for one year only. (39)

While the Town Council was being so reluctant to give funds it is clear that the work of the school was being hindered. The Science classes were doing well despite the conditions under which they were being held, conditions which caused Her Majesty's Inspector to state that the laboratory in which chemistry was taught was deplorable and to urge the Committee to acquire better accommodation. (40) The Committee's hands were tied by the financial constraints, so that nothing could be done.

Bush again came under attack at the July Town Council meeting. Councillor Llewellyn suggested that Bush's salary be reduced by thirty per cent and his teaching increased by thirty per cent! Llewellyn was asked if he had ever been inside the Technical School to which he replied that he had not. It was decided to investigate the proposal that classes should be

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*W.N. Johns was the owner and editor of the "Star of Gwent" and was probably the author of the editorial quoted previously defending Bush.

reduced. (41)

At the next Technical Instruction Committee meeting the chairman, Councillor Howell, put forward a report on re-organisation. The changes were minor except that he called for a reduction of £50 in Bush's salary and that Bush should take over Pullen's Mathematics and Engineering classes together with a new class in anatomy. This suggestion was followed by a long and heated discussion. Eventually the scheme was rejected and Howell resigned from the Committee. (42)

One is left wondering why a man who only four months previously had been defending Bush and his salary with the utmost vigour had now taken the opposite stance. It is probable that we shall never know, but it is a fact that Bush certainly seemed to have a knack of antagonising people. The Town Council, indeed the whole town, seemed to have been either fanatically for him or against him. Some of the enemies he made were powerful men, Councillors Brown (who later became chairman of the Education Committee) Llewellyn, Eeles, Howell, Alderman Jones and Bear. He outlived most of them but some were still in positions of power when he was dismissed almost twenty years later*.

Bush also clashed with the headmasters of the classes at Bolt Street and Maindee. The Committee received a letter in February 1895 from Mr. T. Davies of Bolt Street, complaining about Bush's visit to his classes. In November, 1896, Mr. Gale, of Maindee resigned, but the Committee soothed his feelings by telling him that he could communicate directly with the Committee and that he need not go through Bush. Gale withdrew his resignation and received an extra £15 per year. (43)

The revised report on Technical Education, presented by Councillor Canning, was put to the Town Council in August, 1895. Canning stated that he had always been opposed to the system of payment by results (a revolutionary view) and that the reasons for lack of progress in the School were poor accommodation

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*See chapter 4

and lack of finance*. As far as Bush was concerned in 1892 the Committee had investigated complaints against him and he had been completely cleared. He proposed that the report be adopted.

Councillor Howell proposed as an amendment, that Bush's salary be reduced by £50 per year; it was the only way he could see to reduce expenditure Councillor Llewellyn seconded the proposal. Another unpleasant, heated argument followed with the amendment finally defeated 17-12. (44)

The August meeting of the Technical Instruction Committee saw Thomas Canning elected chairman and the resignation of Llewellyn. As a result it was a very quiet meeting! (45)

A quiet academic year followed. Bush reported reasonable numbers in October, 1895, with 255 at the Free Library, 53 at Dock Street and 102 at Maindee. (46) Chemistry was going particularly well; in fact an assistant had been employed at ten shillings per month to keep the laboratory tidy.

W.N. Johns (a long and faithful friend of the Mechanics' Institute and the Technical School) made moves to have the £1300 of the Hewertson Bequest invested properly and some scheme set up for the proper use of the interest. It was decided that "the interest payable .... on the Hewertson Bequest be .... devoted to scholarships and a prize fund for the reward of successful and meritorious students attending the school". (47) In September, 1896.

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*Brace suggests (p.66) that the lack of progress was partly due to Bush's excessive work load, stating that he had organised classes at Rhymney, Ebbw Vale, Tredegar, Blaenavon, Risca and Cwmbran in his capacity of Director of Technical Studies for the county. Bush in fact was Director of Technical Studies for the County Borough of Newport and not for the County of Monmouthshire (Town Council minutes, Volume 1898/99 p.396 M188 13/7/99). Bush had done work in various towns in the county prior to 1891 but he himself stated that he had given up these classes by 1892. Thus by 1895-96 he should have been devoting his time to the work of the School of Art and Science.

12 scholarships in art were awarded to elementary school children and 12 in science which enabled the holders to move on to the Technical School. At last, some 23 years after it was made, the Hewertson Bequest was being used in a way of which the donor would have approved. However, it was not until 1898 that they were actually called Hewertson scholarships.

A suggestion was made at the December, 1895 Town Council meeting by Councillor Brown and Alderman Jones that the Council should have the majority on the Technical Instruction Committee as it was the Town Council which footed the bill for Technical Education (48) - this gross exaggeration was based on a half penny rate for one year! Nothing came of this suggestion or of another that the Infirmary Buildings be taken over to establish a Central Technical Institute. (49)

When the results for the year were tabulated it was found that the grants earned were £172 for Art and £82 for Science at the Free Library and £29 for Science at Dock Street, £21 overall at Bolt Street and £48 at Maindee. This is surprisingly good considering the adverse conditions under which the classes were taught and the lack of support from the Town Council.

These achievements did not satisfy Councillor Eeles. He reckoned that the Central School (the Free Library section of the Technical School) was not doing enough, and not receiving enough grants from South Kensington. (50) It is possible that this outburst was brought about by the Technical Instruction Committee proposal that the Secretary should give up the duties of Registrar, and that a Mathematics and Geometry teacher should be employed at £120 per annum, who would also act as registrar, (51) but it is more likely that it was a renewal of the personal attack on Bush.

To meet the additional financial requirements the Town Council was asked to grant a quarter penny rate. This was rejected and again Bush was attacked and defended with great vigour. (52) Personalities were being used to prevent any serious discussion of the problems, and serious problems they were, hindering the work of Technical Education in the Town. However a measure of

the importance the Town Council gave to Technical Education can be gauged from the fact that Bush's salary after 23 years service to the Town was £420 per year whereas that of the Headmaster of the newly formed Intermediate school was £440.

Although the Town Council and the Technical Instruction Committee (now including both Councillors Llewellyn and Eeles (47)) were divided on Technical Education, the "Star of Gwent" was clearly in favour. The prize giving, reported very fully with well over four columns, gave Councillor Canning and Mr. Fuller an opportunity to urge the Council to provide better accommodation, particularly for the Science subjects. According to Mr. Fuller the premises at 182 Dock Street "looked like some third-rate doctor's shop in the east end of London". (54)

At the Town Council meeting Councillor Cordey denied that the Technical School was not receiving Town Council support. "He felt sure that the Council was in favour of Technical Instruction if the money was being spent properly. The split .... was because some of them objected to the salary of the Principal being reduced and someone, he forgot what they called him (a voice: Registrar) being appointed".

Councillor Eeles continued his crusade against the Technical School and Bush by proposing that all officials of the school should be given notice. (55) There is no doubt that the financial position was not good, but this was almost entirely due to the fact that the Council refused to grant rate aid. Eeles claimed that removing the staff "would give them (the committee) a free hand and clear the way a good deal" in the re-organisation of Technical Education. (56) However his motion was not accepted but he did raise it at the next meeting where it was defeated 6-9. It is an interesting fact that neither Councillor Eeles nor Councillor Llewellyn were on the list of visitors to the School - perhaps this was too arduous a task and not as easily done as attacking the School and Bush at Town Council meetings.

An investigation of Technical Education in comparable towns in the United

Kingdom brought some interesting facts to light when presented to the Committee in May. Of the 24 towns investigated, only two were receiving as small a grant from Customs and Excise Duty as Newport. The average grant was £1174, whereas Newport received £626. Of the two remaining towns, Warrington received rate support so that only Grimsby spent less on Technical Education. (57)

It is not surprising that when Her Majesty's Inspector reported in June that he was highly critical. His report stated that (i) the teaching was disorganised (ii) the registers looked as if Bush had never seen them (iii) one teacher was not in his class (iv) attendance had fallen off particularly in the more advanced work (v) the modelling class had given up and the Geometry teacher had resigned and no replacement had been arranged. Bush's time was too much taken up with being "Director of Technical Education of the County Borough". The committee replied that the Geometry teacher had been replaced promptly, that they were aware of the disorganisation and had tried to have a Registrar appointed. They agreed that Bush had failed to sign the registers, but they disagreed with the other points raised. (58)

The "Star" attacked the Town Council for its lack of support for Technical Education. It was agreed that the Inspector had found faults but these were mainly due to lack of financial assistance from the Town Council. (59) However there was general agreement that the Technical subjects were not doing as well as the Art subjects, and it was decided to set up a special sub-committee to deal with reorganisation.

This sub-committee proposed that

(i) the Technical and Art Schools be re-organised with a view to making them more efficient;

(ii) the Manufacturing and Commercial interests of the town require the extension of Technical Instruction by the establishment of Engineering and General Mechanics and other classes with the facilities for practical applications;

(iii) Art be separated from Science and Technology, but the separation should not affect the position of the Head of the Art Department;

(iv) Bush be retained as Principal of the Art Department at £350 per annum plus half the Art grant;

(v) the new arrangements for Bush come into effect on 31st March, 1898;

(vi) a Science and Technology master be appointed as a salary to be decided plus one-third of the grant for Science and Technology;

(vii) a Registrar be appointed, to be responsible for records of attendance, receipt of fees, and to assist in other ways in the organisation.

The committee went on to emphasise the great need for a properly equipped Institute building to be provided at an early date. (60)

However when these recommendations came up before the Technical Instruction Committee a minority report was put as an amendment. This proposed that no fundamental changes be made in the conduct or management of the Schools, because

(i) legislative changes were about to be made which could quite well interfere with the above scheme;

(ii) previous results with limited income had been good, so that present arrangements should have a chance with any extra money the Council might give;

(iii) there was no good reason to alter Bush's salary, as he had been in the town's service for 23 years.

There were details the minority would like changed, namely,

(a) an Assistant Art master at £120 per annum to help Bush;

(b) Bush to devote more time to organising classes and the branches at Maindee and Bolt Street;

(c) elementary work to be done at the branch schools, advanced work at the Central School;

(d) extra classes in Science and Technology to be established if there were funds available to run them.

This minority report, too, urged the Council to provide a new building and additional money for the work.

When this minority report, which looks like a personal charter for Bush, was put to the full Technical Instruction Committee it was accepted 9-6, (61) whereupon Thomas Canning resigned as Chairman and Mr. W.M. Fuller, the Chairman of the Executive Sub-committee resigned from the main committee.

At a meeting to elect a new chairman a resolution was put "that in view of the fact four gentlemen in succession have found the position of Chairman intolerable, no attempt be made to fill the Chair until the County Council have dealt with the report passed by this Committee on June 28th". This proposal was defeated 3 to 5 and Mr. W.N. Johns was elected Chairman by 7 votes to 2. (62)

When the minutes of these last two meetings were presented to the Town Council they were read and received but not adopted. The Council decided to set up a special Committee of its own members to "inquire into the present condition of affairs relative to Technical Instruction and relate on the whole matter, with a view to adoption of a new scheme", (passed by 23 to 4). It was also proposed that so that no obstacles should arise in this inquiry "all persons at present in the work of Technical Instruction" be given notice of termination of their engagement. 16 voted for the motion, 16 against, and it was carried on the casting vote of the Mayor. The special Committee which was set up consisted of Aldermen Moses, Jones, Councillors Wheeler, Howell and Llewellyn (all of whom had crossed swords with Bush), Councillors Canning and Phillips (who were for Bush), and Alderman Lyne and Councillor Thomas (neither of whom had expressed views either way). (63)

This Committee decided to give certain principles for the future guidance of Technical Instruction in Newport. It recommended that

(i) there should be two headmasters, one for Art and one for

Science, both at salaries in the range of £200 to £300 per annum. The Committee was strongly against the practice of sharing out the grant, and this should cease.

(ii) a Registrar should be appointed at £100 to £150 per annum;

(iii) there should be no increase in the cash allowance to the School until it was working more efficiently;

(iv) the Technical Instruction Committee should be reduced from 23 to 11, who should all be drawn from the Council, or 8 from the Council and 3 from the School Board;

(v) all assistant teachers should be appointed by the headmasters but salaries would be decided by the Committee. (64)

This report was submitted to the Town Council in September, 1897. It was proposed that the report be received but not adopted and Bush be re-appointed Principal of the Technical School at £300 per annum - this proposal was defeated by 12 to 14. The suggested composition of the Committee was rejected and it was decided (by 17 to 1) that it should be 15 strong - nine from the Council (including the Mayor), 3 from the School Board, two from the Trades Council, and one from the Chamber of Commerce. The amendment that the proposal for a Registrar should be deleted was accepted 15-10 and the further amendment that Bush should be appointed Head of Art at £300 to £400 per annum was accepted 13-12. However, when the whole amended report was put, the voting was 12-12, and the Mayor declined to give a casting vote! (65)

The Special Committee met again and submitted a new report. It was basically the old report with the addition to the first proposal that Bush be appointed head of Art at £300 per annum, and to the fourth that the Committee be 13, eight from the Council, three from the School Board, one from the Trades Council and one from the Chamber of Commerce. After much quibbling the report was accepted, except for an increase in Committee size to 15, by 17 to 5. (66)

Despite all the unrest the actual work of the Technical School continued. In July, 1897 Bush enquired what he should do about the school year as he, Miss Gratte, Miss James, and Mr. Rees had all received three months notice from 16th July. The Committee instructed him to carry on as normal. (67) He did so and in September 36 classes started at the Central School, the Pupil Teacher Centre, Temple Street, and Maindee. However he was not happy with the situation, complaining that this arrangement meant a drop of £150 per year for him. The Committee was not sympathetic and told him to do private teaching. (68)

The new Committee was appointed in October and comprised Alderman Bear, Councillors Wheeler, Canning, Collier, W.C. Phillips, Liscombe, Llewellyn, Williams, and Banks, Rev. Bailey, Rev. Abrahams, Mr. John Williams (these last three from the School Board) Mr. H.J. Thomas and Mr. J. Twomey from the Trades Council, and Mr. F.J. Heybyrne from the Chamber of Commerce. (69) They set up a sub-committee to look at terms of services for a science master and a registrar, and instructed Bush to continue as usual until appointments were made.

When the proposal for a registrar and a science master came before the Town Council it was decided to advertise for the registrar but to delay the appointment of the science master. Bush was instructed to look after Science for the present time and for doing this would receive a total of £400. (70)

Not only was the work of further education being hindered by lack of direction in the organisation and by personal animosities, but also by lack of finance. The "Star" again claimed that the Excise money which had originally been intended for Technical Education was now being shared with the Intermediate Schools. (71) However, the position improved when the Town Council approved a half penny rate for the past year and the same for the current year. The "Star" hoped that the good atmosphere at the Town Council meeting on that occasion towards Technical Education would continue. (72)

When the post of Registrar was advertised there were 61 applications.

A short list of three was drawn up, Mr. George Moores (from Oldham), Mr. Benjamin Evans (Narbeth) and Mr. H. Wilcox (Newport, Mon.). Mr. Moores was appointed and served the town for many years until his retirement. (73) The Committee decided that he and the Principal should submit monthly reports.

The question of accommodation came up early in the new Committee's existence. Several sites were considered for a new building including the old Infirmary on Stow Hill. (74) Eventually it was decided to ask Lord Tredegar for a site, and the Council for financial assistance in the matter. (75) As a temporary measure 24 Bridge Street* was rented from Mr. M. Wheeler as a temporary Technical Institute at £120 per year. Even this simple action was not without problems. Mr. Wheeler withdrew his offer because he objected to comments in the Press and in Committee meetings about the state of the building. but eventually he changed his mind and agreed to let. (In fact, the Town Council had to spend £79 on painting and decorating, £43 on Gas, Plumbing and so on, and £43 on general repairs, so the building could not have been in very good repair. (76) It should also be noted that Mr. Wheeler was a member of the Town Council.) This building would hold, it was reckoned, 200 science students. In fact 260 enrolled in September, 1898. (77) The building is not large by any standards and how that number of students was catered for is very difficult to imagine.

Again Bush managed to disagree with the committee and fall out with the new registrar, Moores. He wanted extra money for extra duties - this the committee refused. Later in the year one of the teachers was disciplined for not having a class covered during his absence and Bush was found to be slack with the registers once again. This led to a clash with Moores, and eventually the police were called in to investigate some missing wooden bowls. The Committee took the side of Moores and Bush was instructed to apologise (78) which he appears to have done reluctantly. (79)

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*This building is still standing and is the oldest existing building in which Technical education classes were held in Newport.

In June, 1898 the Committee eventually stated the conditions of appointment of a Head of Science, Technology and Commerce, and when the position was advertised there were 41 applicants. A short list of five was drawn up, Mr. J.A. Harrison, B.Sc. (London) of Neath, Mr. A.A. Lintern, B.A., B.Sc. (London), F.C.S. of Reading, Mr. G.F. Goodchild, B.A. (Cantab), B.A., B.Sc. (London) of Cambridge, Mr. W.H. Jenkins, B.Sc. (London), Ph.D., F.C.S. of London, and Mr. J.J. Stewart, M.A. (Cantab), B.Sc. (London) of Nottingham. (80) After the interview Stewart was appointed. In the opinion of the author Stewart did as much for further education in Newport as any other man in its history. Councillor Canning was reported as saying at a Town Council meeting that "he believed a first class man had been secured as Science master". (81)

One of Stewart's first tasks was to establish reference libraries for each section in his Department. He organised the classes for the coming sessions and it is interesting to see that Mr. G.R. Bennett, who was to become Principal in 1919, was engaged to teach Hygiene, Sound, Light and Heat. (82) In his first report to the Committee Stewart spoke of the keenness of many students and how several had enrolled for three or four subjects. Advanced French classes were being held and the numbers in book-keeping were so large (almost seventy) that the class had to be divided. (83)

At this stage another long running saga began, this time over a new building. Early in 1899 the Borough Engineer was asked to draw up a tracing of the site for a permanent Technical Institute at Clarence Place, and the Council were requested to ask Lord Tredegar to sell the land. (84) Negotiations were started with Lord Tredegar's agent and it was eventually agreed that his Lordship would sell his freehold for £2,571-16s-8d and Mr. Andrew Dick who ran some sort of market gardening business on the land would sell his interests for £1,200. (85) A sub-committee was set up to obtain all the necessary information for the new Institute and to visit various places (it was suggested that these visits should include Technical

Institutes in Belgium and France) "so as to ensure a building worthy of the town". (86)

It was decided to have a competition among local architects for a plan of the new building with a prize of £50 for the best with a second prize of £20, with an assessor, Mr. S.R. Russell of London, to decide the winner (he was to receive a half per cent of the total proposed outlay plus travelling expenses). (87) The best design was from Mr. Norman M. Brown of 156 Dock Street with Messrs. Swash and Bain second. The designs were put on show to the general public. In a letter to the Committee Mr. Russell stated, "I am certain that when an architect can produce a design like this under the stress of competition he will be able to improve it in the course of time." (88)

Meetings were held and it was decided that the expected cost would be about £34,000. (89) This meant that Russell should have received £170 plus expenses, but the Council would not pay up. His solicitors wrote to the Committee which eventually agreed to pay him £150 plus expenses, provided he agreed, in writing, to act as assessor and adviser to the Committee during the building of the new Technical Institute. (90) This miserly and dishonest attitude was also applied to Mr. Brown who had been appointed architect for the proposed building. Even when he died in March, 1904 he was still owed money and his widow had to resort to her solicitors. It was not until May, 1905 that Mrs. Brown received £475 and that only after a great deal of threat and counter-threat. This was over four years after Brown's original design had been accepted.

At this time Newport Borough Council was engaged in a battle with the Government over the new Education Act and Technical Education was pushed far into the background. Despite the fact that the Town Council had borrowed £20,000 for the Technical Institute building in 1902, (91) no further action was taken until August, 1905 when the Education Committee, meeting in Committee in their discussions on the Holland report (see later), decided to send the plans of the Technical Institute to the Borough Engineer's Office to be

re-modelled on the lines suggested by Mr. Holland. (92) Eventually the Borough Engineer's plans were accepted and the work put out to tender. 17 tenders were submitted, ranging from £36,130 to £44,102 and the lowest from Mr. W.E. Blake of Plymouth was accepted. (93) The foundation stone was laid on 24th June, 1909 by the Mayor of Newport, Councillor G.W. White, and the institute was eventually opened on 29th September, 1910 by the Mayor for that year, Councillor W.M. Blackburn, as Lord Tredegar was prevented by bereavement from doing so. (94)

In the meantime Stewart was weighing up the situation as far as Technical Education itself was concerned. He complained that many students were finding their studies hard because of their lack of an elementary education. (95) Later he complained that "Engineering students were not getting on well in Mathematics". (96) Unfortunately this is very often true even today and the solution being offered in current developments in Newport is to put less and less Mathematics in engineering courses. Despite his reservations about the quality of some of the students, numbers in his department increased steadily, 250 in 1898, 350 in 1899 and 530 in 1900 (Appendix 14). Accommodatio was extremely poor so that the increase could well have been due to his ability as a teacher, organiser and leader.

Despite this upsurge in interest and activity on the academic side, most attention was centred on plans for the new building and the appeal for funds to finance it. In July, 1900 the Committee received the following letter from Dr. F. Rutherfoord Harris:

"I beg to confirm what I told you verbally, namely that I shall be pleased to give up a cheque for £500 towards the Schools of Art, Science, Technology, and Commerce provided you raise a sum of £4500 from other friends of the movement. Although I do not make it a condition, I would most strongly advise that you make special provision for applied chemistry to modern manufactures. I do not think any science school in England has made a feature of applied chemistry, and I think there is a good opportunity for Newport. What we want

is a school where one can get a higher and more scientific education, as applied to the arts and manufactures, than anywhere else in Great Britain". (97)

The Committee resolved that "a hearty vote of thanks be recorded to Dr. Harris for his handsome offer". (91)

There is no record that this offer ever materialised. Some people thought it was of dubious value even when it was made. Rev. H. Abrahams was against the vote of thanks as he felt that the offer had only been a vote-catching gambit. Dr. Harris had recently returned from Rhodesia and South Africa and was a close friend of Cecil Rhodes and Dr. Jameson. Rutherfoord Harris was standing as the Conservative candidate for the Monmouthshire Borough's seat and was duly elected later in 1900. His Liberal opponent stated that there had been financial malpractice during Dr. Harris' campaign, and, in fact, Dr. Harris was unseated by the courts. Very little was heard of Dr. Harris in the Newport area after that and even less of his offer of £500.

An effort was made to make people more aware of what was going on in Technical Education in Newport with an exhibition of Apparatus and Experiments at Bridge Street. These included experiments with Röntgen rays (Bush had also been interested in and experimented with Röntgen rays). (98) Stewart was not only concerned with interesting the general public, but also with the academic welfare of individual students. He was very keen that Science students should take Mathematics in their first year and he had been advising them to do so. (99) Results were not immediately outstanding but in 1900 a first prize of £2 and a silver medal were gained in the City and Guilds Brewing examination. Also there had been a steady improvement in the number of students who were successful in advanced grades, particularly Mathematics. (100)

Results in Art were not outstanding either, but numbers of students were increasing, perhaps due to Bush being able to devote all his time to the Art work.

In his report for the year 1900-01 Stewart stated "Students who have benefited most by the classes are of two sorts: (1) such as have had a good training in Secondary School and have proceeded to more advanced studies at the Technical Institute and (2) working men who have devoted a large part of their leisure to the study of science". He gave examples of both. There were two former students of the Newport Intermediate Schools who had gained six prizes between them during the past year, and there were two working men, one of whom had completed Government examinations in Chemistry and was the Chemistr assistant in the College laboratory, and the other who had gained a gold medal and was doing well in the Post Office. "The facts show that a good secondary education should precede technical education, but that, on the other hand, those who have had no secondary education may, by diligent study, gain a good knowledge of their own particular branch of science, and rise in position through the valuable technological certificates that are open to them". (101)

Some classes continued during the summer months of 1901, and this practice continued in subsequent years. This was, apparently, a self-financing venture. The results of the examinations for the previous session were encouraging with two Honours Technical Certificates from City and Guilds in Plumbing, one first class Honours in Brewing and three first class prizes in the Government examination in Naval Architecture.

The consequence seemed to have been that more students than ever enrolled on courses. Stewart's department reported an extra class in Mathematics as there were twenty in the class, a woodwork class being run on Saturday mornings and a local electrician encouraging his apprentices to attend the Technical Institute. (102) Bush, too, reported increased numbers.

Stewart seems to have been a man with a certain amount of vision, for when reporting to the Committee that students from Monmouthshire were attending classes he suggested that the Committee "should consider the possibility of the new Institute becoming the centre not only for Newport but also for

Monmouthshire generally". (103) Unfortunately the Committee members either lacked this vision or were completely out of touch with the realities of Technical education. For example, when Stewart reported that there were more students than places, Father Bailey suggested that as numbers fell during the session new students should be allowed to fill their places!

Numbers continued to grow. In Elementary Mathematics there were 124 students while in Advanced Mathematics there were 39. Stewart commented, "There has been a continuous improvement during the last few sessions, not only in the number of students entering classes, but also in the standard of knowledge attained. The regularity with which all the best students return session after session to continue their studies is particularly satisfactory". (104)

Although numbers continued to grow in Art the growth appears to have been in the lower level classes. In fact doubt was expressed on more than one occasion about whether much of the work being done at the Branch Art classes should be done in a Technical Institute as it over-lapped the work done in the Elementary Schools. (105) However not all Art work carried out was of such a low level. As a result of examinations in 1902 Edith G. Phillips and Edward A. Keene were awarded Board of Education Free Scholarships. They were in a long line of art scholars whose skill was developed to such an extent by their tuition at the Technical Institute that they were able to go to study at the Royal College of Art.

The 1902-03 session started with an extra class in Practical Physics and new classes in Botany and Geology. As a result Stewart asked the Committee to rent more space in Caxton Place. An exciting development was the agreement of the Alexandra Dock and Railway Company (manager Mr. J. Macauly) to send apprentices to an afternoon class in machine construction. (106) Stewart realised the importance of this and the following year he submitted a scheme for the commencement of more day classes. Unfortunately the state of the building meant that the Board of Education refused to pay Newport the

necessary grants and the scheme was not implemented. Again the inadequacy of the building was a stumbling block to progress. The Technical Instruction Committee had urged in 1902 that "the Committee should proceed immediately to carry out the scheme of erecting a new Technical Institute", (107) and this was approved by the full Town Council on 12th August, 1902. Unfortunately in 1902, as far as this building was concerned, a new Education Act was passed, and the Town Council decided that the Technical Instruction Committee should not enter into any further contracts or make additional appointments until the new Education Scheme had been adopted. (108)

Stewart re-acted as strongly as he was able to this. In his report to the Technical Instruction Committee he stated that "it was earnestly to be desired that no great delay would take place in providing a suitably equipped building for Technical Education. The lack of proper facilities for higher instruction in the town fell especially hard on working men and their children. Wealthy people could send their sons to other towns where adequate provision was made for Technical training, but many young men of excellent abilities had to depend on the provision made for Technical Education in Newport, and the facilities provided at present compared very unfavourably with those in other towns of the same size in the country". (109)

Under the scheme for the County Borough of Newport, Section 11 of the Education Act, 1902 stated "that from the appointed day the powers and duties o the present Technical Instruction Committee shall be transferred to the Educati Committee, provided that the Committee shall be empowered, if they think fit, to appoint a sub-committee consisting either wholly or partly of members of the Committee for the purposes of carrying on the work of the said Technical Instruction Committee". (110)

Unfortunately the whole scheme was not acceptable to the Council which was split almost fifty-fifty on it. A battle developed with central Government which lasted well over a year and involved two public enquiries, as well as many long and heated letters to the Press. Eventually the Government appeared to give way and an Education Committee of 20 members was appointed, 18 being

Town Councillors, the remaining two being women appointed by the Council. Of the 18 men ten were "progressives" or "backwoodsmen" (according to which political line the reporter took, Liberal or Conservative), four were of the opposing view and four were uncommitted. (111) The result of this delay and change was that the new building and Technical Education were pushed very much into the background, and the new Education Committee was not very favourably inclined either.

Despite administrative muddle (has it improved even today ?) Stewart and Bush battled on. Stewart, encouraged by the day class introduced, sent a circular to firms in the town about a scheme running at Jarrow which encouraged apprentices to pursue Technical Education. He received favourable replies from Mr. A.J. Stevens of the Uskside Iron Works and Mr. J. Macaulay of Alexandra Docks. (112) Mr. Macauley outlined in the "Star" the scheme already working at his firm. The apprentices were given half a day off for studying at the Technical Institute. Those who passed the elementary stage received an extra one shilling per week, and those who were successful at the advanced stage received two shillings extra per week. In addition the apprentic with the best result prior to the last year of his apprenticeship and who had a good time-keeping record would spend his final year in the drawing office. (113)

Elsewhere in Wales towns were more forward-looking. Alderman Canning, chairman of the Technical Instruction Committee reported that the Court of the University of Wales, of which he was a member, had been approached by Swansea Technical College about the possibility of that college offering degrees of the University of Wales.* Such was the interest in Swansea that £3,000 had been spent on workshops alone. Canning felt that Newport should investigate its position in this area before the next meeting of the Court. (114) He followed this up by writing to the Governing body of the University "calling their attention to the fact that Newport hopes to have, in the near future, a satisfactory Technical College and suggesting that any resolution as to the admission of Swansea Technical College should be so worded that it would

* University College, Swansea was not formed for another fourteen years.

equally well apply to the case of Newport". (115) His pressure brought results for the University Court meeting on 22nd January, 1904 passed the resolution, "That this Court is of the opinion that the appeal of the Swansea Corporation can best be met by an extension of the Charter that will give the University power to admit to certain privileges any institution possessing adequate facilities in point of equipment and staff for the teaching covering the whole course of work for an initial degree in any faculty; these privileges being at least those of presenting candidates in that faculty under Art XIV of the Charter". (115) Canning reported that, in his opinion the Technical College, Newport could become a constituent college for degrees in Science and Applied Science provided arrangements as to (i) buildings (ii) equipment (iii) staff were satisfactory to the University of Wales authorities.

Thus Newport had, in 1904, a golden opportunity of having its own University College. Such an opportunity rarely occurs twice and certainly in Newport it has not occurred since that occasion. Unfortunately, except for a few men of vision like Canning, Stewart, Alderman Howell and most of the Technical Instruction Committee, the Town Councillors in Newport turned their backs on the opportunity. Perhaps this attitude is typified by the attitude of Alderman Bear, who, when a motion from the Technical Instruction Committee concerning a new building came before the Town Council, stated that there was no need at that present time, there was a Technical Institute and things should wait until the Education Committee was set up. Bear prevailed and the motion was defeated "by a large majority". (116)

The "South Wales Argus", in a series of articles on Technical Education in Europe, dealt with the United Kingdom and finally, Newport. "The missed opportunities of the Monmouthshire town are not least noticeable in the matter of education". The present facilities for science at the Technical Institute consisted of five small class rooms, two small laboratories and two workshops with meagre space and appliances - yet the previous year there had been 545 science students. "In the third year of the twentieth century, with the

provision of the Technical Instruction Act existing in the town, the Town Council of Newport consider the occasion a suitable one for insisting on delay in proceeding with the erection of a new building, the plans for which have been sanctioned by the Council itself and approved by representatives of the Government". (117) Other towns were compared with Newport and its facilities for technical education and it was stated that the Technical Institute was doing remarkably well despite adverse conditions and massive difficulties. The "Argus" could not understand the attitude of the Town Council as it (the "Argus") reckoned that the new building would not cost the Council anything as the interest on and the repayment of the loan would be met out of the revenue of the Institute (probably not a strictly true statement).

A later article was on Future Prospects in Newport for Technical Education. The writer of the article (not named) felt that with its present policy the Council was losing the town thousands of pounds in grants. There were very few day students at the Institute, but a new building would enable this aspect of the work to expand, as well as giving more facilities for advanced work. In addition many more evening students could attend and it would also be a centre for the training of teachers. "If Newport is to be an ignorant town, as it largely is at present, then it has no future; if it rises to the occasion and seizes the opportunity which lies ready to hand, it will not be distanced by those active rivals which surround it on all sides. It is sad that up to the present the verdict upon it must be that of the ancient Hebrew prophet, "My people is destroyed for lack of knowledge."" (118)

This seemed to have little effect for a letter from Councillor Swash (a member of the Technical Instruction Committee), stated that too much money was being spent with too little results. He would welcome an inquiry into technical education in Newport. (119) (It should be noted that Councillor Swash was connected with the firm whose plans for the new building had been placed second). Nor was the Town Council particularly impressed, for, when a

proposal was made that Mr. T.B. Shaw, His Majesty's Chief Inspector should report on the buildings available for technical education in the town, this was rejected.

Stewart was not prepared to be silent about the situation and repeatedly he stressed the difficult and sometimes almost impossible conditions under which classes were held. At one Committee meeting, when reporting that there had been 545 students (average age 20.7 years) during the session he stated, "The unhealthy overcrowding in most of the rooms tends to make attendance decrease, and there is no accommodation in the present workshops and laboratories for any increase in numbers .... On some evenings the Practical Plumbing has been carried on with difficulty. Although the Practical Physics class has been divided up into two, meeting on different evenings, yet frequently the room has been far too crowded, and the room itself is quite unfit for proper Physical laboratory work. The Chemical laboratory .... will not admit of a larger number of workers than those attending the Elementary Class during the present session. Many of the students who have been attending the Physics and Electricity classes are sufficiently advanced to proceed with practical work in Technical Electricity, but there is no provision .... Instruction in Engineering generally can scarcely be said to be commenced, though a considerable number of the students are well fitted to profit by such work. The work at the Institute has now reached a stage at which its prospects of future development would have been most hopeful if it could have been transferred to a suitably equipped building. It is a matter of great regret that students of good ability in Newport should find their prospects of advancement in life seriously interfered with through the lack of proper provision for technical education in the town". (120)

Unfortunately Stewart was "a voice crying in the wilderness". However, in spite of the difficulties, he was able to report that the results for the session were better than any previous session. R.D. Jones and G. Jones had both been awarded £50 scholarships to University College, Cardiff, while

A.E. Ellis had won a £30 scholarship to University College, Aberystwyth. (It should be noted that these were pupils from the Intermediate School who regularly attended evening classes in Science and Mathematics at the Technical Institute. A.E. Ellis, for example, had studied Mathematics for four years at the Institute). On the Art side King's prizes in art were awarded to Edith Phillips and Norman Keene. (121) Stewart stated, "Newport students do not compare unfavourably with those in other places. This is more pleasing considering the discouraging circumstances under which Newport students of Science are doomed to work". (122)

A plan was put forward to expand the day classes, (123) but it was turned down because the Board of Education was not willing to give the grant of £6 per first year student and £9 per second year student because of the state of the building. (124) It is impossible to estimate the damage done to technical education as a whole in Newport and to individual students because of the totally inadequate facilities. The Town Council was under constant pressure from the Press, Stewart, and various members of the Technical Instruction Committee, but to no avail. That august body decided that Technical Instruction was of little importance - the Intermediate Schools were of far more value. The "Argus", however, felt that things would improve when the new Education Act was implemented and the Council was alone responsibl for Technical Education in the town. (125) However, it was almost five years before the new Education Committee gave final permission to build the new Technical Institute and almost seven years before that building was opened.

One is amazed that the work could and did continue under such conditions. but not only did it continue it also expanded. Stewart reported that much advanced work had been built up over the past three years; "the whole tone of the Institution is improving in regard to diligence and attention to work". Advanced classes were being held in Light, Heat, Theoretical Mechanics, Applied Mechanics, and Steam. Commerce and Technology were also doing well and the numbers in French were so great that the class had to be divided into three

separate classes. (126)

Two months later Stewart was able to report that a class in Electrical Engineering had been started and another for the apprentices of Messrs. Alger, Electricians would be held on Saturday afternoons. He also reported that G.R. Bennett had gained his B.Sc. (London). (127)

Classes continued to grow, and not only in science and commerce. The Inspectors stated that the standard of teaching in Art was "sound" and numbers had increased. (128) Stewart reported 45 day-time students, with the Alexandra Docks Company well to the fore. A class for more advanced Electrical Engineering was being run with the practical class at the power station.

Meanwhile the Council was winning its battle against the Government's Education Act and in 1904 the Education Committee was set up in the form Newport Council wanted. The Technical Instruction Committee met for the last time on 28th June, 1904. Mr. Liscombe stated that he wished they were handing over a liability to the Education Committee in the shape of a new building rather than a balance of £372. (129)

One of the first actions of the new Education Committee was to decide that the Press should be admitted to its meetings. Councillor Brown, not a very good friend of Technical Education, was elected chairman. It ignored Technical and Art Education at its first meeting except to approve the last resolutions of the defunct Technical Instruction Committee. At its second meeting it was decided that a full investigation was needed into education in general in the County Borough, and that Professor M.E. Saddler, M.A., Ll.D. should be asked "to report and make recommendations upon the Educational requirements of the County Borough of Newport, with special recommendations to the due co-ordination of Elementary, Intermediate and Technical Education, the provision for the instruction and training of Pupil Teachers and the general arrangements for administration". (130) Saddler was unable to undertake the task and recommended J.L. Holland.

A Secondary Education Sub-Committee was set up to be responsible (under

the direction of the Education Committee) for Secondary and Technical Education. Alderman Howell and Alderman Canning were appointed Chairman and Vice-Chairman respectively and proved to be very good choices. Howell (director of a large Steel firm) and Canning (director of the local gas company) were both keenly interested in Technical education and had been for many years. (131) Under the new regime Heads of all the Schools (including Stewart and Bush) were asked to attend Committee meetings and to report at each meeting. (132)

In the new academic year numbers continued to grow; a class was formed in Physiology, Stage II but one could not be started in Metallurgy as it was too expensive to set up a laboratory. How the administration work was dealt with, one does not know, for earlier, Moores, the Registrar, had been appointed Secretary and Correspondent to the Secondary Education Sub-Committee and he and his assistant had been transferred to the Education Offices, in Charles Street, from the Technical Institute. (133)

The Sub-Committee were aware of the difficulties with the inadequate accommodation. Stewart did his best to keep this before them. In his report for 1903-04 he stated, "Perhaps the most notable feature of the year's work has been the considerable increase in the number of advanced students. This feature has been increasingly visible from year to year, so that the scanty space in the temporary premises is severely taxed .... It is regrettable, that, during the session, deserving students have had to be turned away from the Institute through lack of room". (134)

In January, 1905 it was decided that there must be efforts made to re-house the Technical Institute and in February the Sub-committee "gave certain instructions" to Mr. Ward of the Borough Engineer's Department about it. (135) Nothing happened immediately. the chief reason being the delay in Holland's report on Education in the Borough. The local paper again tried to exercise some influence by printing reports of new Technical College buildings being opened in various parts of the country.

A scheme for a local Exhibition of £25 for competition among students at the Technical Institute tenable at the Royal College of Science in London was put forward, Stewart being asked to report. (136) The full Education Committee saw no merit in the scheme and rejected it by 10 to 7. (137)

Holland's report appeared in July, 1905. He considered each area of education in the town and in a final chapter made recommendations. Chapter V was on Evening Continuation Schools and Technical Classes. He felt that not enough work was being done at the Continuation Schools. They should broaden their scope, become more attractive and offer subjects like Civics, Geography, History, Woodwork and perhaps Gymnastics. Much more Art work should be done there, taking some of the elementary work away from the Art School.

As far as the Technical Classes were concerned, the Commercial courses were most popular. French was well supported, but he wondered why there were no classes in German or Spanish. He suggested that much of the elementary work should be done at the Continuation Schools. On the Engineering side, too many of the students had insufficient elementary education; the building was shocking, but Stewart was doing sterling work; money would have to be spent to provide for the requirements of industry in the area.

Chapter VI was on the Art School. "It can hardly be said that the School of Art comes up to the standard which one looks for after seeing what is being done in the schools which ought to feed it". (138) Clearly one reason was the poor accommodation, but the standard was low, with many of the students either still in primary school or only having just left it. Their enthusiasm should not be dampened, but the School of Art was not the place for them. Holland felt that things could be improved if there were no students under sixteen in the School and if all Art work in the town were under the direction of the Head of the School of Art.

Holland's recommendations were in Chapter XII. For the Evening Continuation Schools these were:-

(i) to improve the teaching of drawing;

(ii) to try to make them more attractive by introducing History, Geography, Civics, Manual Instruction, and Gymnastics into the curriculum;

(iii) to cut down the meetings to two a week;

(iv) to make them more preparatory for the Technical College by carrying out Elementary Technical Instruction in them, if possible under the supervision of the Instructors at the Technical College;

(v) to establish an Evening School of Commercial Subjects;

(vi) to establish an Evening School of Domestic Arts.

For the Technical College he recommended that:-

(i) early arrangements be made for re-housing the College;

(ii) the age of admission be raised to 16, except in the case of pupils coming from the Higher Elementary Schools;

(iii) the more elementary work be distributed among the Evening Schools;

(iv) resources be concentrated on such branches of Technical Education as are of direct importance to the industries of Newport;

(v) the system of day instruction for Engineering apprentices be developed;

(vi) the practical interest of leaders of industry in Newport in the College be encouraged.

The recommendations for the School of Art were that:-

(i) one responsible organiser of Art Teaching in the Borough, with the exception of the Secondary Schools, who should be the Principal of the School of Art, be appointed;

(ii) the more elementary work of the School of Art be distributed among the Evening Schools;

(iii) the standard of the School of Art be raised as far as possible;

(iv) the Hewertson Scholarships be used for the encouragement of higher Art work than is within the powers of the present holders of these Scholarships;

(v) the premises of the School of Art be renovated as soon as possible. (139)

The report was received and adopted at the August Education Committee meeting, when it was decided to give priority to setting up a Higher Elementary School and re-organising the Pupil Teacher Centre. (140) One result of this was that Practical Elementary Science for these trainee teachers was to be taken "at the Technical School under the supervision of Mr. J.J. Stewart until provision can be made for it at the Pupil Teacher Centre". (141) Another result of the report was that plans for the new Technical Institute were to be sent to the Borough Engineer's Office to be re-modelled on the lines suggested by Holland. (142)

The work at the Technical Institute continued unaffected by the report and committee decisions. Overall numbers continued to increase, but some classes had to be discontinued because of low numbers. These were in the Science and Technology areas, but Art enrolments were sufficient for all classes to run.

Stewart continued to be concerned about the poor standard of some of the new students. "Many students enter the classes but are ill-prepared for the study of Science and Technology. It is much desired that the Evening Continuation Classes in the town should be developed and made to serve as preparatory classes for pupils who might afterwards enter the Technical Institute". (143) This had been the aim of the Continuation Classes for many years, but unfortunately this aim was never achieved. Gradually these classes developed into the more elementary and leisure orientated areas that they are today. They continued under the supervision of the Principal of the Technical Institute and the Committee responsible for Technical Education for many years until in 1950 they came under the Further Education Committee (which was not Further Education in the sense used in this thesis).

The poor accommodation continued to dominate speeches and reports. At the prize giving in January 1906 the Mayor commented on it and stated that he

"hoped the Committee would take the matter in hand and see that the accommodation which was necessary for proper education work was provided". (144) Mr. R.E. Hughes, at the same gathering urged the Committee "to carry out their schemes with a broad and free hand". (144) The Committee was not to be rushed and decided that several modern Technical and Art Schools should be visited before definite proposals for the new building were approved. (145)

There were signs of improvement within the Institute itself; a group of 24 engineering students continued with Mathematics classes during the summer of 1906, (146) (in the early days of Technical Education practically all classes finished at Easter) and Stewart was able to report an increased interest by employers in the Technical Institute with one or more permitting apprentices to attend day classes. (147) In September, 1906 large numbers enrolled for mathematics, a subject which Stewart seems to have made particularly interesting, judging from numbers in classes and results obtained over a number of years. In fact, 68 enrolled for Practical Mathematics and the class had to be divided. (148)

A Scholarship Sub-committee was set up and recommended that there should be three scholarships of £25 per year for three years to the Royal College of Science (or any other institute approved by the Committee) and three scholarships of £25 per year for three years to the Royal College of Art. (149) It was referred back for re-consideration in November, and the same scheme was re-submitted in December. However, it was not until April, 1908 that the first applications under the scheme were received. (150) There were eight applicants for the scholarship to the Royal College of Art and F.C. Richards was awarded the first one. (151) The following year J.A. Hurn was awarded the Scholarship to the Royal College of Science and Elsie M. Simmonds the Art scholarship. (152)

Meanwhile the building scheme was progressing very slowly. In November, 1906 it was reported that the plans for the building had been accepted by the Board of Education and a tender of £3,295 for the "Plenum" heating system for

it had been approved. By the following April bills of quantities were being drawn up and Stewart had visited several Technical Schools and "had gained much valuable information about equipment". (153)

During the summer of 1907 classes continued in Practical Mathematics and Advanced Practical Geometry. The session had been a good one. Numbers were up again in Art and in Science and Technology. Bush reported students coming from as far as Ebbw Vale and Chepstow and urged that Art teachers in schools should attend to keep up to date with developments in the subject. Stewart reported 503 students attending 55 classes. (154)

Stewart continued to express concern about the small numbers coming from the Evening Continuation Classes. He reported that only five per cent of students at the Technical Institute had entered via these classes. The Committee decided to send a circular to these classes, asking them to tell parents of the advantages of children going on to the Technical Institute. (155)

At the prize giving in December the Mayor stated that the Council was well aware of the lack of accommodation, but it was no fault on their part. The land was available and the plans had been approved, but the money had not yet been approved by the Government. (156) He did not mention, however, that £20,000 had been borrowed in 1902 and that was still available. It is true that another £26,000 was needed, but one is left with the feeling that Technical Education was not a very high priority with the Town Council. The money had been borrowed for the Higher Elementary School without too much trouble. Perhaps another indication of the Council's attitude can be seen from salaries paid. Stewart and Bush each received £300 per year, whereas the Headmaster of the Boys Intermediate School received £600 per year and the Headmistress of the Girls Intermediate School received £310 per year.

Stewart did not appear to be discouraged; perhaps he could see the new building actually being built, for he put forward schemes and proposals for co-ordinating and developing technical education in Newport. (157) These were referred to a sub-committee which decided that

(i) there should be free entry to the Evening Continuation Classes in the year pupils left elementary school;

(ii) there should be 60 free scholarships for the second year;

(iii) there should be 12 free scholarships from these classes to the Technical Institute. (152)

Stewart also recommended the formation of a Day Technical Department at the Newport Technical Institute which would provide instruction in Science and Applied Science on a two or three year course. The Committee thought this was premature. In addition he suggested a Day Training Department for Teachers in Elementary Schools - the Committee felt that this suggestion could not be put into operation with the present accommodation; it would require a separate establishment. It was decided to investigate the possibilit of setting up a Training College with hostels. (159) No one mentioned the possibility of co-operating with Monmouthshire which, at that time, was in the process of setting up the Training College at Caerleon - less than six miles away.

Students at the Institute were doing well; that was the opinion not only of Stewart but also the local Press. Stewart claimed that the best science students were not competing for the local Science Scholarship because they were already up to the standard of London University B.Sc. Some would be taking the external examination that summer and would pass. (160) The Inspectors were pleased with the standard of work, "The work has been carried on in a very satisfactory manner, especially considering the inadequacy and unsuitability of the premises .... An interesting feature of the work is the fact that a number of schoolmasters attend the Science classes with a view to obtaining University Degrees in Science". (161) The Press, too, was full of praise for the quality of the work done at the Institute. In an article at the start of the first term in 1908 the "Argus" stated that students were doing well despite the poor conditions under which they were working. (162) Local employers appeared to be satisfied with the standard and quality of the work.

Mr. Macauly (Alexandra Docks and Railway Company) writing to Stewart stated "I very much appreciate your excellent services, and thank you very heartily for your interest in the young men connected with this company". (163)

Bush and Stewart were asked to meet to arrange courses for the Continuation Classes so that the work done in them "may be more correlated with schemes of instruction in existence at the School of Art and the Technical Institute". (164) The link in the Art area seems to have been quite good; it was in science and technology that there was difficulty. The former is illustrated, perhaps, by the fact that in 1908 there were 1250 candidates for the Hewertson Art scholarships. (165)

It must have been a time of rejoicing when the new building was put out to tender. 17 tenders were received, ranging from £36,130 to £44,102. The cheapest, that of Mr. W.E. Blake, of Plymouth, was accepted (166) in September 1908 and after the customary wrangling the contract was signed in January, 1909. (167) The foundation stone was laid by the Mayor, Councillor Graham W. White on 24th June, 1909. Alderman Canning proposed the vote of thanks and stated, in his remarks, that the old system from 1891 had been a success. He urged Newport to use the new Institute and suggested that the time was ripe for it to be compulsory for young men and women to attend Evening Continuation Classes from the time they left school at 14 until they were 17 so that they would be better equipped when they came on to the Technical Institute. (168)

1908-09 was a good academic year for the Institute. Three engineering students won £50 scholarships from Monmouthshire to University College, Cardiff. More students were attending during the day, not only Art students, but also engineering students and apprentices. Some classes were so successful that the students requested that they be continued during the summer. 54 engineering students and 13 carpentry students attended these summer courses. (169)

The new session opened with quiet excitement for it was to be the last year under the terrible conditions so long endured. It was decided to spend

£6,000 on equipment and furnishing for the new building (170) and that members of staff should visit various Colleges. Mr. S.G. Watts was sent to Manchester and Poplar, and Mr. Groome to Bristol and Swansea. (171)

Mr. Watts was appointed as a full-time teacher at £200 a year in July, and when Stewart suggested extra day classes he was sent to Swansea to see what happened there and to report to the Committee.

An interesting event took place in June, 1910 which was not directly connected with the Technical Institute. Mr. G.R. Bennett, B.Sc., who had been a part-time teacher at the Institute since 1898, and was the headmaster at a local elementary school, was appointed Headmaster of the Higher Elementary School. Mr. Bennett, who became Principal of the Technical Institute in 1919, was appointed Headmaster without interview and with no shortlist being drawn up. (172) The same thing occurred when he was appointed Principal.

It was a successful year academically, a good way to end an era. Stewart reported that the results were better than any previous year in examinations for City and Guilds, the Board of Education and the London Chamber of Commerce. (173) W. Jones was awarded the Art scholarship and Harry Rowlands the Science scholarship.

It had been arranged that Lord Tredegar should officially open the new building on 29th September, 1910. The plaque in the entrance hall of the building in Clarence Place says he did, but, in fact, he was unable to attend because of a family bereavement. Instead the Mayor, Councillor W.M. Blackburn performed the Opening Ceremony.

Thus an era in Further Education in Newport came to an end. It is fitting to let the words of William Bush draw it to a close as he contemplated the new building. "In the fine building in Clarence Place, so thoroughly well designed and equipped for every branch of Technical Instruction, we have an Institute second to none in the country". (174)

What had been achieved in the 19 years from 1891 to 1910? Numbers of students had more than doubled from 370 in 1891 to 748 in 1910; many students

had been better prepared for their employment and had advanced because of what they had learned at the Technical Institute. Three major hurdles had prevented the work from progressing as far and as fast as it should have done. First, there was the Council's reluctance to spend money, particularly in the earlier years of the period, on Further Education. This, without doubt, seriously hindered the work. Secondly, and this is linked with the first, was the inadequate accommodation. It is amazing that so much was done in the shocking buildings which were available. Thirdly, there was Bush's ability to antagonise people. This caused endless friction and despite his talent in art and other areas, must have prevented the steady progress of the work.

On the positive side, the Education Committee had appointed a man of real ability in Stewart. Not one record can be traced of him causing antagonism during his period in Newport. Even Bush seemed to get on well with him. Further he was a man of vision, and it is unfortunate that some of his ideas were not taken up at the time. There were also real friends of further education on the Town Council - Aldermen Howell and Canning being the two most noteworthy. Unfortunately they were in the minority.

Two areas where, with hindsight, the Committee failed the town of Newport were co-operation with Monmouthshire and the question of University College status for the Technical Institute. The latter may be linked to finance while the former was due, perhaps, to misplaced civic pride.

Despite failures and shortcomings, Further Education in Newport in September, 1910 had a fine opportunity to achieve a great deal as the Technical Institute and School of Art moved into its fine new building at Clarence Place.

The last ten years of Victoria's reign and the Edwardian era was the period when the British Empire was probably at its zenith. At home the lot of the working man was continuing to improve and although life was still very hard for the great mass of the people life was becoming more tolerable. Economically there had been a set back in the years 1891 to 1894 (175), but

this was overcome and industry and exports were expanding. Newport was growing as a dock town of major importance with a further dock expansion in the early years of the new century.

The major landmark on the education scene was the passing of the 1902 Education Act which set up Local Education Authorities with responsibility for primary, secondary, higher and technical education. It soon became clear that the main emphasis would be on the development of secondary education, with very little left over for the development of Technical Education. (176) This was the pattern in Newport where further education was very much the poor relation.

In the early part of the new century came the development of the concept of day release for engineering students. This was not immediately taken up by many authorities and Stewart in Newport was probably one of its earliest advocates. Unfortunately the Education Committee shared neither his enthusiasm nor his vision.

There was no national policy on further education during the period 1891 - 1910 and each area developed its facilities according to the generosity and enthusiasm of the committee in charge of further education. In Sunderland where a building had been erected expressly for further education before 1891, the college began to specialise in engineering. (177) By 1908 a Day Training College for teachers had been established (178) and there was much emphasis on University of London degree and Diploma in Engineering courses (179

By contrast, in Gateshead there was only a School of Art and that closed in 1912. All technical education was being carried out in the evening classes at the Higher Grade School with 600 students attending these classes in 1900. (180) The technical subjects were discontinued after the Education Act of 1902 (180) but there was considerable enthusiasm for manual instruction. The impression is given that in Gateshead further education consisted of a jumble of classes under the Education Committee.

In Southport, a town where money was freely available for further

education, the work expanded in the healthy environment of a purpose-built building so that by 1902-03 there were 1,795 students attending classes. (181)

In Middlesborough money was always short despite occasional financial aid from Middlesborough Council, North Riding of Yorkshire County Council and Durham County Council for the penny rate was never levied and the "Whiskey money" was used for other purposes. (182) In 1900 the Council took over responsibility for the evening classes in the High School (which constituted further education in the Borough) and even then was not very generous with its financial assistance. Butterworth writes, "One possible consequence of greater municipal generosity might have been the erection of a fully equipped Technical College .... 30 years before its eventual foundation". (183) The picture in Middlesborough is therefore much the same as in Newport - fortunately for Newport its Technical College was built in 1910, some twenty years before that in Middlesborough.

Warrington, again, is a contrast, for there the Technical College was formed in 1891. (184) It was supported by the Co-operative movement in the town, (185) and perhaps this is one of the reasons that the continuation schools in the town were successful. (186) The Borough Council was generous with money and all the "whiskey money" was spent on further education, as well as the grant received from Cheshire County Council. (187)

As at the conclusion of the period 1871 - 1890, Newport's position was somewhere in the middle ground - not as bad as some, but worse than many. In areas of the country where co-operation had taken place between Borough and County Councils the work flourished, as it did in areas where the local authorities were generous with financial help. In Newport the work was hindered because of failures in both these areas; the fact that it had progressed was due largely to the industry of Bush and particularly Stewart. By September, 1910 Newport had a new building which compared favourably with any in towns of like standing in the country and consequently further education in the town was in a position to grow vigourously.

Chapter 4

A New Start and Stagnation

1910 - 1933

The opening of the building in Clarence Place was a great boost to Further Education in Newport. By the end of September, 1910 over 700 students had enrolled (1) and overall in the first year there were 305 students in Art and 813 in Technology and Commerce. (2) New classes were started and existing classes had increased numbers. However, instead of encouraging Stewart and Bush in their efforts the Press and the Education Committee started to urge the "strictest possible economy" (3) and that the Institute give "value for money". (4) It is the duty of the Press and the Local Authority to see that public money is being spent wisely, but it must have been very discouraging for both Bush and Stewart, who had for so many years been working with minimal funds, under the most adverse conditions, that they were not given a little more freedom to expand the work.

Two problems of a more serious nature were encountered during this first session. The first was with regard to the payment for students from Monmouthshire. In February, 1911 there were 115 such students and the Committee decided to send a deputation to the Monmouthshire Education Committee. (5) The meeting took place in May when Alderman Howell stated that it was costing Newport £6 for each Monmouthshire student and there were, at that time, 135 such students. However, Monmouthshire declined to pay anything as, it claimed, the addresses of the students had not been supplied. (6) This continued to be a difficulty for many years.

The second problem was that requests for certain classes had to be turned down. There was a definite demand for classes in baking and confectionary but there was not enough space in the building for these classes. (7) It could be that this inability to provide for such classes helped in making Cardiff the centre for almost all areas of advanced work in later years.

There were some encouragements for Stewart and Bush, Mrs. C.H. Bailey invested £1000 in Corporation stocks, the interest from which was to be used to provide three scholarships of £12 each per year for boys from the Higher Elementary School. (8) An extra class had to be provided on Thursday afternoons

for engineering students from the Alexandra Dock and Railway Company and the Uskside Engineering Company, (9) and when classes were run during the summer months Stewart was able to report that they were being attended by 40 apprentices. (10)

Bush and Stewart were both pleased with the achievements of the first session in the new building. Bush reported that various extra classes had to be provided, almost half the students studying Art were over 21 and three former students of the Institute were studying at the Royal College of Art. Stewart stated that "a large number of Engineering firms in Newport now allow their pupils the privilege of attending day classes chiefly in machine construction, meeting in the afternoon. This is a great advantage to the students and tends to lessen the evening work which in some cases was perhaps somewhat excessive after a day spent in the workshop .... The general work of the Institute has shown healthy development and the students are increasingly taking grouped courses of several related subjects and extending their studies over a period of several years". (11)

The new session (1911-12) began with the "Argus" urging the youth of Newport and Monmouthshire to seize the great opportunities that the Institute offered. The long article listed the many and varied classes that were being offered. (12)

There was, however, still an undercurrent of discontent. It is difficult to tell what exactly the problem was as all the allegations were so vague. Councillor Wright suggested that the management was not good enough. "Something was wrong with the practical management", he claimed. (13) This was followed by letters to the "Argus" from past students stating that conditions were not as good at the College as they ought to be, and urged the Committee to exercise more control. (14, 15) The discontent continued with complaints about expenditure. J.P. Elms, secretary of the Ratepayers Association, claimed Newport was spending more on Technical Education than Plymouth, and intended to spend more than Cardiff. He stated that there were 774 students

in 1907-08 while there were only 775 in the current year. (16) There is no indication of where Mr. Elms obtained his information, but the figures for 1910-11, comparing Cardiff, Newport and Swansea did not support his claim. In that year Cardiff spent 4.5 pence in the pound, Swansea 7.1 pence and Newport 2.8 pence. (17)

At the beginning of the 1911-12 session there was an inspection of the Technical Institute and the Board of Education report was received in January, 1912. For the Art Department it recommended that

(i) Bush should report on the revision of fees, the Hewertson scholarship scheme and on certain teachers;

(ii) he should prepare definite courses of study for all grades of student;

(iii) he should instruct an advanced course for one evening per week and give general lectures occasionally to all Art students;

(iv) the Art pupil teacher should attend for at least 24 hours per week for study and teaching;

(v) Art scholarships should only be renewed if students attend three evenings each week;

(vi) the teachers of design should give a systematic course on design and students should be encouraged to use note-books;

(vii) the appointment of a second Master should not be made at that time;

(viii) the possibility of exchanging teachers with other local authorities should be investigated;

(ix) the prospectus should be sent out to employers. (18)

Although none of the above are very serious individually, the impression is given that overall there was some disorganisation. Perhaps Bush was past his prime, or perhaps he was just not a good administrator.

For the Technical Department, the report recommended that

(i) there should be an annual conference with employers and a consultative committee of employers and education committee members

on the curriculum;

(ii) Stewart should prepare courses for various grades of students;

(iii) he should investigate the possibility of cooking classes. (19)

For both departments it recommended that

(i) staff meetings should be held once a month for Art and Technical staff;

(ii) Bush and Stewart should take more interest in the work of the Evening Schools;

(iii) Bush and Stewart should give two lectures each to Evening School students in the Institute hall. (19)

As a result of these recommendations a meeting was held with employers and a Consultative Committee was set up. (20) Some employers already appreciated the work the College was doing; Mr. Macauly wrote to the Committee stating that good work was being done at the College for his apprentices. (21)

Numbers in the second session were down with 255 in Art and 643 in Technical subjects, a drop of 170 in the latter. This could be off-set to some extent by the fact that 100 students doing elementary book-keeping had been transferred to the Evening Schools, Stewart, in the Annual Report, urged Monmouthshire to be generous with their students and give something towards the cost of their tuition. He also felt that the Government should help financially. Many former students of the Institute were working in the Colonies and Britain was benefiting. (22)

The 1912-13 session was a quiet one. More guidance was being given to students on the courses they should take (an idea which seems to have come from Stewart), but not everyone thought this advice was sound. One angry parent wrote to the "Argus" to say that his son, who wanted to do metallurgy, had been told by Stewart to do physics, chemistry and mathematics first. The parent thought that this was most unsound advice. (23) The "Argus", after advising Stewart to see the irate parent, stated that, in its opinion students should be guided and that Stewart was taking the right approach. (24)

In December, 1912 Stewart presented a scheme for Day Classes to the Committee (no details are given in the minutes) and this was referred to a Sub-committee. (25) It was the first of many such schemes he was to put forward during the next 18 months. In January the Sub-committee asked him to prepare draft time-tables, to find what response there would be in the town, and to work out a scheme showing the minimum day course which could be adopted by the existing staff. (26) In February he was asked to prepare syllabuses, estimate the cost and consult Bush. (27) The next mention of a day class scheme is in October, 1913 when Stewart presented another scheme, and the Committee resolved that "the principle of Day Classes at the Technical Institute be approved", but it was felt that more time was needed to consider the scheme. (28) It should be noted that the plans being put forward would have meant day classes throughout the week; in the meantime Stewart had arranged day classes for Physics, Pure Mathematics, Applied Mathematics and Mechanics on Wednesdays from 9-30 a.m. to 1-00 p.m. and 2-30 p.m. to 5-30 p.m., to which two local firms were sending employees. (29)

A special meeting was held to discuss the plans and it was decided to ask five local employers for their views on students attending day classes. By April, 1914 Stewart had his plans finalised and presented them to the Committee. He suggested that classes should be held on five days each week in Mathematics, Physics, Chemistry and Mechanical and Electrical Engineering which would prepare students for the University of London examinations in Science and Engineering, and for those of the Conjoint Board of Physicians and Surgeons in Medicine and Science. To cope with these classes two extra full-time staff would be needed, one for Physics, Electrical Engineering and some Mathematics, and one for Chemistry, some Physics and some Mathematics. The cost would be £400 per year (£200 for each teacher), but £300 would be received in grants from the Board of Education and £200 would be saved on part-time staff. The students would attend classes for between 800 and 900 hours per session. Stewart told the Committee that "under the proposed scheme

the work in Science and Engineering would be much more thoroughly and completely done than is possible in Evening classes, and it would be possible to develop the teaching of Electrical as well as Mechanical Engineering". The Committee decided to recommend the appointment of two full-time staff as required so that the classes could start in the next session. (30)

However the full Secondary Committee referred the whole matter back to the sub-committee (31) and Stewart was again asked to submit a scheme, which he did in May, 1914. He told the sub-committee that he believed that there was support in the town for a day-class scheme. At that time there were 71 engineering apprentices attending during the day and employers were willing to give more support. The sub-committee again decided to recommend the appointment of two extra full-time staff. (32)

This time it was the full Education Committee which stopped progress. It decided not to appoint the staff until there were ten students for the full-time classes. (This delaying motion was proposed and seconded by two Labour councillors). (33)

At the next Secondary Education Committee meeting Stewart suggested Monmouthshire should be contacted about full-time students (34) and the county promised to consider the scheme in September. (35)

In August, 1914 the First World War broke out and although everyone tried to carry on as normal, schemes such as full-time day classes faded quietly into the background. It was not resurrected for two years.

While the various schemes for full-time classes were being considered, the work at the Institute was continuing. In the 1912-13 session a class in Photography (36) was started and during the summer eight extra classes were held. (37) One student at the Institute obtained his B.Sc. (London) during the year.

The 1913-14 session saw many small advances. The Post Office requested classes in Telegraphy and Telephone so that its students could be doing a

group of courses. (38) During the year classes were started in Bread making and Confectionary, Practical Banking, Botany, Metal Work, Oxy-acetylene Welding, Lithographic and Process Printing. Perhaps more important were the day classes in Mathematics and Mechanics (already mentioned) and a French class for women over 19 which attracted ten students. (39) During the summer months three day classes and nine evening classes were held. (40)

Another important move was the attempt to start classes in Domestic Arts. This was first raised in December, 1913, (41) and by March 1914, 33 students had expressed a desire to attend such classes. The Committee decided to try to equip a suitable room, initially run a course in the summer term at a cost of £1-1s per pupil for one day per week, and try to employ a teacher. (42) At the next meeting it was decided to spend £3,085 on equipment and the modification of rooms. (43) This was a considerable sum so that it appears that the Committee's plans were serious and far-reaching but again delay by the full Secondary Education Committee meant that the scheme had to be abandoned. (44)

The war meant that numbers in classes fell as young men volunteered for the forces. Despite this, the work continued although all schemes for development were dropped. However, in October, 1914 an event took place which brought about a complete change in the administrative structure of the Institute. The Secondary Education Committee met on 24th October. "This meeting was convened to consider certain circumstances* concerning the conduct of Mr. W. Bush, Headmaster of the Newport School of Art on the 26th ultimo". (45) Bush was asked to explain the matter and was suspended from work until the matter was cleared up. At its next meeting the Committee resolved that "Mr. Bush be asked to resign his position of Headmaster of the Newport School of Art; but the Committee are prepared to offer him another post". (46) The Education Committee discussed the matter in private and the decision was upheld. (47) Bush handed in his notice three weeks later. In February, 1915,

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*What these circumstances were have never been made public.

when his notice expired, he was appointed an assistant at the Art School at £200 per annum. The "Argus" reported that the Councillors believed that they were being generous to Bush - after all he had only given 42 years service to the town! (48)

A month later the "Argus" reported that Bush was going to be teaching the elementary work, suggested that perhaps he was not up to this even and £200 a year was very good for what he would be doing. (49) The Art staff at the Institute was not happy - some of them had lost classes and pay because Bush had to have classes to teach. The staff concerned were given back their classes because of the unrest. The Board of Education told the Education Committee that Bush must not work at the School of Art again. (50) The Education Committee gave him a month's holiday and appointed him Art adviser to the primary schools in the Borough, a position he held until his death on 24th October, 1926.

On his death the Elementary Education Committee resolved that "(a) an expression of the Committee's condolence and sympathy be sent to the relatives, and the Committee place on record their appreciation of the services which Mr. Bush has rendered to the cause of Education in Newport; (b) that the salary be paid up to the 31st October, 1926". (51) There is no mention of his death either in the Technical College and Institute Committee minutes or those of the Education Committee - although it was recorded in the Quarterly Report.

Thus, in 1915 William Bush left the Further Education scene. For almost 43 years he had played a dominant role, and it is clear that he made a major contribution to Further Education in Newport. He was not perfect, and his major weakness seems to have been his ability to upset or even make enemies of those men on the various committees which were responsible for the over-sight of his work. By 1915 most of the men he had antagonised were dead, but perhaps there were sufficient left in positions of power to make sure that when the chance came he would be dismissed. What the incident was which

brought about his dismissal is not recorded. He seems to have been a man who was either liked or disliked. He had little time for the social activities which perhaps would have made him more popular with the people in power. He was not a member of the Newport Athletics Club, that bastion of the Establishment, but he was liked by many working men. "A mechanic", writing in 1897, stated that Bush was interested in ornithology, had no time for blood sports, and did not go about ingratiating himself with the influencial people of the town; "working men prefer him as he is, and admire him for what he is". (52)

The dismissal of Bush gave the Education Committee the opportunity for wholesale re-organisation. The first step was to form a separate Technical Instruction Committee which would be independent of the Secondary Education Committee, and would report back direct to the Education Committee. Stewart was asked to report on the possibility of having a separate Head of Engineering, setting up a grouped course for Artisans, and the re-arrangement of the present classes and curriculum. (53) In February, 1915 a scheme was put forward by the Committee for the complete re-organisation of the Institute's administrative structure. It proposed that a Principal should be appointed who would control Art, Science, Technology and Commerce. Stewart would continue in his present position, and the position of Head of the Art School would be filled after the appointment of the Principal. (54)

When these proposals came before the full Education Committee two amendments were put. The first was that the re-organisation should be left until after the war - this was defeated by 4 to 7 - the second was that Stewart should be made Principal and this was defeated by 2 to 7. (55)

The position was advertised and there were 129 applicants. Feelings in the town ran high on the matter. The "Argus" urged the Education Committee to make sure the right decision was made. It claimed that everything at the Institute was not what it should have been. (56) Immediately before the Technical Institute Committee drew up the short list, a petition was handed to

the members asking that the decision about the Principal be re-considered and that, if it was decided to go ahead, then Stewart should be appointed. (57) The Committee, however, went ahead and drew up a short list of six.

The six were

R.W. Holland, M.A., M.Sc., Ll.D. from London

W.S. Templeton, M.A. from Devonport

W.W. Mayne, B.A., B.Sc. from London

D.P. Grubb, B.Sc., A.R.S.M., M.Eng. from Barnsley

J.J. Stewart, M.A., B.Sc. from Newport

J. Williams, M.A. from Abergele. (58)

The selection was made on 17th May, 1915. D.P. Grubb withdrew before the meeting and Holland was selected. His salary was to be £520 per annum. (59)

Not everyone approved. Mr. Thomas, a Labour Councillor urged that Stewart should be appointed as a temporary measure, and that the position be filled permanently after the war. Holland, he said was of military age, "He would be better engaged in digging trenches in France or helping to make guns in Birmingham". The report of the Appointment sub-committee was accepted by 8 to 3. (60)

Stewart handed in his resignation to the Education Committee to take effect on 31st August, 1915. (61) It is difficult to see how he could have stayed on. In the opinion of the author, this was a major tragedy for the Institute and further education in Newport. He had been in charge of Science, Technology and Commerce for 17 years. He had been a constant source of new ideas and had a real concern for his students. He did his job well and efficiently, carrying out the instructions of the Committees which were over him. If all of his schemes had been implemented further education in Newport would have been in a far better state than it was when he resigned. He did not seem to be an ambitious man, appearing to have little wish to move to more exalted positions away from Newport. As he was about 55 at this time he would

have probably stayed in his post until his retirement. He would have been a very stable influence during a period of change and uncertainty. He left Newport and there is no record of him ever returning to the town to which he gave so much. He died in about 1940, at the age of about 80.

The new Principal, Robert Wolstenholme Holland, was 35 years old at the time of his appointment, having been born in Cheshire on 21st March, 1880. His father was a Justice of the Peace in Blackpool, so it would appear that he came from a middle-class or upper-class background. Robert Holland had obtained a First Class Honours degree (B.Sc.) in Chemistry and Physics from Manchester University in 1901; he followed this with an M.Sc. in Chemistry in 1904. He became the Dauntesey Legal Scholar at Manchester University in 1905 and was awarded First Class Honours at the Bar Final in 1907. He was called to the Bar in 1908 at the Middle Temple. He gained an M.A. in Economics in 1909 and 1914 was awarded the LL.D. of Manchester University for his thesis "The Child, its Education, Protection and Employment". He was also a trained teacher and had worked for twelve years under Manchester Education Committee. He had experience in Technical, Evening, Continuation and Higher Commercial classes and had lectured on Commercial and Industrial Law, Banking Company Law, Secretarial Law and Practice, as well as Mathematics, Physics and Chemistry. He had been in charge of large classes of business men and had assisted in the organisation of a school of more than 3,000 pupils. From 1913 he had been Director of Studies at Pitman's Schools in London. (62)

It is clear that Holland was a very clever man indeed, and it is also clear, in retrospect, that, on the evidence of his past career, his stay in Newport would not be a very long one.

Holland took up his appointment in June, 1915. The Committee asked him to recommend one of the 50 applicants for the position of Head of Art. He informed the Committee that there would be no need to appoint a Head of Science as he would take control in that area as well as lecture on some of the commercial subjects. (63) He also suggested day classes in Shorthand, Book-

keeping, Typewriting and General Commercial Practice for girls and the Committee agreed to this. (64)

Donald Sinclair, A.R.C.A. was appointed Head of Art in July (65) and S.G. Watts, Head of Engineering in October. (66) This last appointment indicated that engineering was being given a prominent place in the Institute, it having been built up over the years by Stewart.

The "Argus" printed a long article on the Institute at the beginning of the new session. "It is hoped that the Institute is about to commence a new era of wider usefulness .... Some reforms have been introduced possibly as a preliminary to more sweeping changes". It reported that Holland was himself interviewing students. "In the main it (the information about artisan and Technology and Commerce courses) does not differ greatly from the old syllabus, but the old syllabus of the Art School has been scrapped entirely and nine new courses of study mapped out .... The Technical Institute will re-open under more promising conditions than ever; and we sincerely hope that the youth of Newport and the county will rise to the level of their educational opportunities". (67) The "Argus" and the Technical Institute Committee were clearly impressed by Holland, but probably the situation at the Institute would have been much the same had Stewart been appointed Principal.

As a result of the war, classes were started at the Institute and in various works to train munitions workers, and these helped to boost student numbers. (68) Such classes continued until almost the end of the war. With most men of military age in the armed forces there was a shortage of staff in the commercial field, and Holland was quick to realise this. He put forward a scheme for afternoon classes in General Commercial work which started in January, 1916. (69) He stated that there was a shortage of shorthand typists, but "the greatest demand was for girls who are quick at figures, and that was merely a matter of rubbing up what the girls already knew". (70)

He also tried to make the Continuation Schools more effective. These

schools were intended to bridge the gap between the primary schools and the Technical Institute. Since their inception they had not really succeeded and attempt after attempt had been made to assist them. Holland met the head-teachers of the primary schools to discuss the problem. They realised the difficulties in getting children to continue after leaving school, particularly in the more technical subjects, for they had difficulties in seeing the relevance of such subjects. "It was the opinion of the meeting that little could be done to overcome these difficulties without compulsory further education for which the time is now ripe". (71) The Committee felt that local authorities should be trying to bring pressure on the Board of Education to this effect. It was also suggested that Monmouthshire should be asked to back compulsory further education. (72)

In September, 1916 Holland reported that student hours for the 1915-16 session were 45,000 compared with 32,000 for 1914-15 (73) (much of this increase would be taken up by the munitions training classes and classes of mechanics for the Royal Flying Corps). A new class was started for dispensers and the Oxyacetylene class was so large that it had to be divided and more equipment bought. (74)

In December, 1916 Holland put forward a scheme for the Organisation of Day Classes. He proposed that there should be

(i) an Engineering Trade School - that is, a Junior Technical school;

(ii) a Preparatory Commercial School;

(iii) Organised Advanced course in Pure Science and Engineering;

(iv) Tuition for disabled soldiers. (75)

The first and second of these proposals meant an increase in student numbers and staff, but basically they just meant that some of the work of the continuation schools would be done more thoroughly at the Technical Institute, and that students with a more technical or commercial inclination in the High Schools would transfer at some stage to the Technical Institute. Thus these two schools were involved in secondary education and continued at the Institute

until the 1950's. They are outside the scope of this thesis in the main.

The third proposal included complete courses in Chemistry, Physics, Mathematics, Engineering and Dispensing, and it was intended that they would be suitable for those preparing for the dental, medical and other professions. The four proposals as a whole would mean a doubling of staff costs. Holland recommended that the future of the Pupil Teacher centre should be considered with a view to moving it elsewhere, to provide the extra space needed at the Institute when the proposals were introduced. (75)

The "Argus" reported the proposals and the Education Committee's comments on them. The chairman of the Committee claimed that several attempts had been made to get Monmouthshire to co-operate over Technical Education, but at that time it looked as if the County would not co-operate. Some councillors in Newport were opposed to the scheme on financial grounds, but the Institute was under-utilised, it was claimed, and the new scheme was thought by some to be putting the facilities to better use. The proposals were passed by 8 votes to 1. (76)

Although Monmouthshire was, in general, unwilling to co-operate over Technical Education, on two occasions Newport was asked to assist the County. In January, 1917 a class in chemistry for teachers was wanted at the Institute and this was run on Saturday afternoons during the summer months. (77) Newport was not so helpful when the county asked for help in the re-training of disabled Monmouthshire soldiers. (78) However, classes were held for disabled servicemen in the following session in clerical work, draughtsmanship repair of jewellery, cabinet making, and upholstery, and although no mention is made of Monmouthshire men, it is difficult to believe that they were excluded.

Meanwhile Holland was busy with organising the new Junior schools and the Advanced classes. By April, 1917 he reported that both schools were running and that five extra full-time staff were appointed. (79) The "Argus" felt that it had been a good session and the results in Book-keeping were particularly

good, both in Royal Society of Arts examinations and those of the London Chamber of Commerce. (80)

At the start of the 1917-18 session an article in the "Argus" described the new sessions programme. "The outstanding features are the full and part-time day courses in Pure and Applied Science which are presented to the public of Newport for the first time. It is now possible for students .... to complete the whole of the degree course in Applied Science or in Pure Science by full or part-time day attendance at the Technical Institute". There were also Pharmaceutical and dispensing courses as well as additional Commercial and general courses. (81)

A Royal Commission on University Education in Wales was set up in 1917. The Mayor, Councillor Swash, and Holland attended it on behalf of Newport. They urged that, in the future, Technical Education in Newport should be given the opportunity of becoming a constituent part of the University of Wales. They pointed out that there had been an expansion of the work in Engineering and Commerce. They also told the Commission that Newport wanted Monmouthshire to co-operate in the running of the Technical Institute. The Commission replied that Newport had "still some way to go before it could consider itself of University standing". Nevertheless the "Argus" believed that big steps had been made in the past year in the work in Newport. (82)

One step Holland proposed to improve Newport's standing was to set up Advisory committees for the Engineering and the Commercial departments. The Engineering Advisory committee would be made up of eight employers, eight employees and three Technical Institute Committee members. The proposal was accepted by the Technical Institute Committee, (83) without question as were all Holland's proposals, it appears.

From this time onwards it is not easy to find out from minutes of the various Committees what exactly was taking place educationally. They are

not as full as previously and often imprecise.*

The 1918 Fisher Education Act put forward proposals which, if they had been implemented, would have completely changed further education throughout England and Wales. It was proposed that all children leaving school should attend continuation classes for not less than eight hours each week until they were 18. Holland realised that in Newport this could only be carried out in the Technical Institute and any other like bodies that might be set up. He thoroughly investigated the implications for Newport and prepared a comprehensive memorandum which the Technical Institute Committee submitted to the Education Committee. (85) (see Appendix 12 for the full memorandum). This was to receive "consideration along with the requirements, with a view to their incorporation in the Complete Scheme to be forwarded to the Board of Education". (85) Unfortunately the Fisher Education Act was not fully implemented - indeed the proposal for some form of compulsory part-time education is not even in operation today - and the Newport "Complete Scheme" if it was submitted certainly did not contain the proposals in the memorandum.

Holland continued with his re-organisation. He proposed new salary scales for the staff which were accepted by the Committee, (86) he had the Pupil Teacher Centre transferred to the Higher Elementary School, (87) and he recommended (together with J. Lloyd Davies, the Chairman of the Committee) the establishment of a School for Nautical Training at the Institute. The aim was to provide three years training for boys between the age of 13 and 14, the school being modelled on the School at Hull. It started in September, 1918 with 14 boys, (88) but it was never very popular and just faded away. The Committee was very pleased with the way Holland was running the Institute and increased his salary to £700 in October, 1918. It was probably a great shock when in February of the following year, he submitted his resignation;

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*A typical one is M95 of the meeting on 20th May, 1918, concerning the case of stolen clothing and a letter from the parent. "The matter was fully discussed, and the Secretary was instructed to reply .... in terms suggested by the Chairman". (84)

"he had been offered and had accepted a very remunerative position in London". (89) The post was, in fact, his previous post, that of Director of Studies at Pitman's Schools in London. (90)

Holland's departure caused the "Argus" to write of him, "He re-organised the Institute, gave it a new impetus, and started it upon the path of progress". (91) He certainly had been very active both inside and outside the Institute. He had been Chairman of the Local Advisory Committee of the Ministry of Labour, Honorary Commissioner for Military Service (Civil Liabilities) for which he was awarded the O.B.E. in January, 1919, (92) Vice-chairman of the Local War Pensions Commission and Chairman of the Employment sub-committee of the Joint Disablement Commission for South Wales and Monmouthshire. "He made the Technical Institute a power", stated the "Argus". (91)

What had Holland achieved in his three years and ten months in Newport? Without doubt he was an excellent administrator, and a very astute man - the decisions of the Technical Institute Committee were the ones he wanted to be made while he was Principal. He contributed much to local society during the war with his voluntary work. At the Institute numbers had increased, particularly on the commerce side, and there were full-time day classes in the Junior Technical Schools as well as the advanced day courses. But were these significant gains as far as further education was concerned? The Junior Technical Schools did feed some pupils through to the Institute proper, but almost certainly the advanced day classes would have come - Stewart had been suggesting them for years before his departure. Much of the increase in numbers and student hours can be attributed to the training of munitions workers and mechanics for the Royal Flying Corps, and the introduction of the Junior Technical Schools. Holland pointed the Institute in the right direction and may have set it on that course, but it had not advanced very far. There appears to have been genuine regret at his departure from the Institute and the town, but, in retrospect, one is left wondering if Holland merely used

Newport as a convenient stepping-stone for the duration of the war - his departure from Pitman's in 1915 and his return to the same post six months after the end of the war does give cause for thought.

The Principal's job was advertised at a salary of £600 per annum and attracted 75 applicants. A short list of six was drawn up

(i) Thomas Dean, M.A., M.Sc., aged 37 from Swindon

(ii) David P. Grubb, B.Sc., M.Eng., A.R.S.M., aged 40 from Barnsley

(iii) Ralph Wolfenden, M.B.E., M.Sc., Barrister-at-law, aged 35 from Teddington

(iv) Abel J. Jones, M.A., B.Sc., Ph.D., aged 40 from Cardiff

(v) Robert Gawler, M.Sc., F.I.C., aged 39 from Leeds

(vi) J.H. Vincent, M.A., D.Sc., A.R.C.S., aged 47 from Wembley

They were invited to attend for interview, "with third-class rail fare and reasonable expenses". (93)

After a preliminary interview it was decided that Dean, Grubb and Vincent should go before the Technical Institute Committee. (94) The full Committee recommended the appointment of David Grubb, who was at the time Principal of Barnsley Technical Institute. (95) This appointment was made on 11th March, 1919, but on 26th April Grubb wrote to the Committee stating that "owing to certain circumstances having arisen, he would be unable to take up the post of Principal". (96) He expressed his regret for any inconvenience caused. The "Argus" reported that the Barnsley Education Committee had increased his salary. (97)

It is easy to blame the Committee for the appointment but the members do seem to have had very short memories, for when Holland was appointed almost four years previously, Grubb had been on the short list and had, on that occasion, withdrawn before interview. (98) This action ought to have raised some doubts in the minds of the Committee when the post of Principal again became vacant.

The Committee now had a very real problem. Holland had gone and the

Institute was without a Principal. An obvious solution would have been to have appointed an acting Principal, say Mr. S.G. Watts, Head of Engineering, and re-advertised the post. "The question of filling the post was discussed and considered at length". It was resolved "that the post be offered to Mr. G.R. Bennett, B.Sc. (London), Head Master of the Higher Elementary School for Boys, Newport, on the same terms and conditions offered to Mr. Grubb". (99) Bennett was asked to meet the Chairman forthwith.

There is no explanation whatsoever of this decision. It is incredible that the Committee, which had been talking, only two years previously, of University status for the Institute, should now appoint a Principal without advertising, without a short list and without even an interview. Bennett had been appointed Headmaster of the Higher Elementary School in the same way in 1910. (100) It is almost certain that the reason for this strange decision will never be known.

Mr. George R. Bennett was born in 1871. He had taught Physics and Mathematics at the Institute in the evenings for many years from about 1898; he had taken his degree by studying at the Institute. He had taught at elementary schools, higher grade schools, and was Headmaster of the Higher Elementary School. Very little else is known about him. Johnny Morris, the well-known broadcaster, and probably Bennett's most famous "old-boy", remembers him as "a most sympathetic man". (101)

In his first report, which covered the academic year 1918-19, Bennett praised Holland for the work he had done. "The increase in the number of students, from 781 in 1914* to 1,140 in 1919 is an indication of the progress made by the institute under the energetic control and wise guidance of Dr. Holland". (102) The work had expanded, for there were then in existence full-time classes in Art and Crafts, Science and Technology, Medicine,

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*This, in fact, was the number of science and technology students in 1913-14, not the total number of students which was 1020, almost the same number as in 1919. Bennett corrected this mistake in his following annual report.

Dentistry and Pharmacy, as well as Junior departments for Engineering, Navigation and Commerce.

During his first full year as Principal numbers of students increased - mainly because extra classes had to be arranged for ex-servicemen and the increase in Junior students. Bennett's first request to the Committee was for three extra staff to cope with this expansion. (103) A year later extra full-time lecturers had to be appointed in Architecture and in Electrical Engineering. Classes were held in Motor mechanics for the first time in October 1919 (104) and a class for uncertificated teachers, designed to enable them to obtain their certificates, was formed in January, 1920. (105) These classes, together with various short courses, such as a 16 lecture course on "Statistics for Accountants", meant that the Institute was crowded in the early months of 1920. (106)

Bennett realised that the number of students for 1919-20 was exceptional, due to the release of ex-servicemen and partly due to the temporary demand for female clerks. He stated that the major development over the past five years had been the conversion of the Institute from an evening school to an institution in which fully organised day courses were in operation. "With a return to the more normal conditions of a time of peace, it has been possible to turn our thoughts once more to the development of work of a University standard. So far it has only been possible to re-establish classes that were rudely interrupted by the outbreak of war, but some examination successes have been obtained which I hope are only an indication of what may be done in this direction during the next few years". (107)

During the session 1919-20 the name of the Institute was changed to "The County Borough of Newport Technical College" by the Technical Institute Committee, (108) to indicate that full-time day classes were being run there. The full Education Committee decided to add "and Institute" to the name.

At the start of the 1920-21 session the local press printed a short article with some details of courses offered. There was pressure on the

facilities in the engineering workshops. Before the War there were 80 student hours per week in the workshop, whereas for the current session it amounted to 900 student hours per week. The existing equipment was completely inadequate. To bring the workshop up to standard four lathes with milling heads and tools, a high class lathe for demonstration and a universal grinder were required at a cost of £2000. (109) The Committee decided to buy one new lathe with milling head and tools, and spread the rest of the expenditure over the next two years. (110) However, the following year it was decided not to purchase extra equipment. (111) This reluctance to spend money on equipment and other facilities was one of the major difficulties Bennett had to face during the entire period of his principalship. The lack of equipment and the quality of what was available was one of the main criticisms made in the report of the 1934 inspection of the College. (112)

Another financial problem the Committee had to tackle was the cost of students from outside the County Borough. It was decided to ask Monmouthshire County Council to give a grant towards the cost of its students at the College. (113) Monmouthshire Council decided that it would contribute nothing; Newport considered putting up out-of-town students' fees by fifty per cent, (114) and did so for the 1921-22 session. Early in 1922 it was decided to approach Monmouthshire again when it was learned that Glamorgan was paying Cardiff £1500 per year for Glamorgan students at Cardiff Technical College. (115) A meeting was held to discuss the matter, but the Monmouthshire attitude was inflexible. The County claimed that many of its students at the Technical College should be paying their own fees, and a large number of the remainder should not be there at all because they were too young. (116) The Newport Committee decided that, as it had not received an official answer from the Monmouthshire Education Committee, Monmouthshire fees should be increased to an economic level. (117) In July, 1923 it was decided that these fees should be twice the Newport fees. Monmouthshire re-acted swiftly and offered the Borough £4 for each student (88 of them) for the current (1922-23) session,

and would pay £4 for each they specifically recommended for 1923-24. The Newport response was to ask for grants for sessions prior to 1922-23. (118)

It appears no money changed hands as a result of these negotiations for in January, 1925 the two Committees were still arguing. (119) In September, 1925 Monmouthshire offered £800 for the 1925-26 session - but subject to conditions. These were that (i) Monmouthshire students should enjoy the same facilities as Newport students (ii) there should be no limit on the number of County students and (iii) there should be no contribution for 1923-24 and 1924-25. If Newport did not accept in seven days Monmouthshire would transfer all its students to Cardiff Technical College. This "offer" was rejected - the Newport Committee really had no alternative with such a high-handed attitude as Monmouthshire took. (120)

There was no movement in the tussle for about four years during which period numbers fell at the Technical College, with Monmouthshire students going to study in Cardiff - probably passing through Newport en route! In 1927 the Monmouthshire Education Committee decided not to give any financial help to its students who passed entrance examinations for the Technical College. (121) The result of this action was that numbers continued to fall at the College, and individual students must have suffered. The effect of the ban can be seen from the dramatic fall in the number of County students sitting for the Hewertson scholarships. In 1927 there were 55, in 1929 there were only seven. (122)

It was clear that this situation could not continue. Bennett made the first move. In his speech at the 1929 prizegiving he urged co-operation between Newport and Monmouthshire. (123) The "Argus" printed an article about the dispute over fees and urged Monmouthshire to pay the difference between its students fees and those of Newport students. The County should set up junior technical colleges, and the two authorities should establish a joint college for more advanced work, a suggestion not taken up for twenty years. (124) The Mayor of Newport (Councillor W.T. Griffiths) asked if it

would be possible to get a large number of Monmouthshire students to use the College. He was told that the Education Committee was still awaiting a reply from Monmouthshire. (125)

Eventually it took intervention from the Board of Education to bring the two sides together. In February, 1930 a meeting was held under the chairmanshi of Sir Percy Watkins, Permanent Secretary of the Welsh Department of the Board of Education to discuss the whole matter of fees of students at the College. (126) Some tough bargaining took place, but in July, 1930 agreement was reached, with a complicated formula which settled the question of fees and gave Monmouthshire two places on the College Governors. (127) At last the County and the Borough could work together for the educational benefit of the whole area, but unfortunately much damage had been done. The Technical College in Cardiff, which had suffered no such setbacks, was now far ahead both in the standard of work and numbers of students, and another opportunity had been lost to Newport and Monmouthshire.

The work of the College had to continue despite the political wrangles. At the end of the 1920-21 session Bennett reported that "another very satisfactory feature is the rapid development of the day work", (128) - the junior technical and commercial schools were progressing steadily and more firms were giving day release to some of their employees. Bennett continued, "There is a marked increase in the number of local firms who are giving their apprentices freedom from the workshop for one day a week to attend classes at the College". (128) It had been a good year generally for the College with 19 successes in examinations of a University standard (intermediate level and first M.B.) as well as successes in various professional examinations.

At the start of the 1921-22 session the "Argus" ran its usual article on the Technical College and the good work being done there. A major step forward was the decision to adopt the scheme for the award of National Certificates and Diplomas of the Institute of Mechanical Engineering. The first Ordinary National Certificates (ONC) were awarded in Newport in 1923.

Numbers were down for the session, from 1762 in 1919-20, to 1333 in 1920-21, and 1094 in 1921-22. Bennett attributed much of the fall to the depression in the building and engineering trades. He went on to contrast the 1913-14 session with 1020 students, working 56,000 hours, giving 55 hours per student for the session with the 1094 students in 1921-22 working 268,000 hours, giving 264 hours per student. (129) This comparison, which looks impressive, is very unfair. The 1020 students in 1913-14 were all part-time students whereas the figure for 1921-22 contained between 100 and 200 full-time students at the Junior Technical, Commercial and Nautical Schools. The Junior students should not really be taken into consideration when dealing with further education, and also a full-time student would be equivalent to about ten part-time students as far as hours are concerned. When this is taken into account we see that numbers of genuine further education students had, in fact, dropped, and although student hours for genuine further education students had definitely increased the increase was far from dramatic and can be partly accounted for by the increased number of students being granted day release.

The 1922-23 numbers were up slightly but part-time classes in Pharmacy and Oxyacetylene welding were discontinued. (130) However seven students sat for the ONC in Mechanical Engineering and six passed. In Art, too, there were successes. One student obtained a full Drawing Certificate of the Board of Education, which was recognised as a degree equivalent qualification, and a second won an "Owen Jones" Prize and a Royal Society of Arts Bronze medal for an original design for a silk brocade. During this year the College was recognised by the Pharmaceutical Society for the first part of its qualifying examination. (131)

Numbers were down by ten per cent in 1923-24 and as a result the Art staff was reduced by one, as was the Commercial staff. The part-time lecturer in Architecture was dismissed and the Instructor in Engineering took over the caretaker's job. (132) Bennett attributed this fall in numbers to the closing

of the Junior Nautical School, but this could not account for a drop of over one hundred, particularly as a new class for Post Office engineers was started. (133)

Despite these set-backs there were academic successes with four students obtaining London University Degrees. Bennett reported, "These successes in Higher Examinations are, I think, the most satisfactory that I have yet been able to record for any single session. The only regrettable feature in the development of this higher work is the very limited number of matriculated students who enter the College ready and willing to proceed to graduation." (134)

The 1924-25 session was notable only for the fact that nothing worthy of note occurred. The Principal's report is missing and the "Argus" did not even have its customary article at the beginning of the session.

Numbers fell by ten per cent again in 1925-26 so that the Committee decided to cut back on staff. One full-time and two part-time members of the engineering staff were dismissed. (135) Bennett believed that "the continued dislocation of industry in the district" was one cause of the trouble. There was, too, a tendency among parents to encourage boys to take up clerical work rather than a trade and the result was that there was a falling off in the numbers of boys entering engineering and in the quality of engineering students. (136)

Engineering student numbers fell again the following session - the strikes and unrest in the mines were blamed, but numbers from the building trade were up and a new class was started for plumbers. The Art School continued to do well and this year sent seven students to the Royal College of Art. (137) The work in Art had a high reputation in the area and in South Wales then and this high standard and reputation has continued up to the present day.

There was an improvement in numbers in 1927-28, but Bennett felt that there were more young people who could benefit from what the College had to offer. There were not enough of them taking advantage of the 50 per cent reduction in fees for the first year after leaving school - many were not

prepared to sacrifice some of their leisure time to study. Among the good results achieved at the College this year was the award of a silver medal for first place in the United Kingdom in gasfitting. The Art School, too, continued to produce very good results. (138)

A major advance in 1928-29 was the decision to offer an ONC in Electrical Engineering. There were 14 successes in University standard examinations in Science and Commerce and four in Art. The Accountancy class was also commended for good work, (139) and Mr. W.H. Dudley, a member of staff at the School of Art had a landscape in oils hung at the Royal Academy. (140) Numbers were down slightly compared with the previous session, due almost entirely to there being 27 fewer Monmouthshire students because of the disagreement over fees.

From this point numbers never again fell below a thousand, according to the Principal's reports (see Chapter 5). In 1929-30 numbers were up by over 200, an increase of more than 20 per cent. There had been some vigorous publicity before the session commenced with special posters and prospectuses and leaflets sent to schools, employers and school leavers from the Elementary and Central Schools, (141) a venture which seems to have been successful. At the end of the year three students sat for the ONC in Electrical Engineering and two of them were successful. In Art Leonard Evetts gained a distinction in industrial art and was awarded a National Scholarship.

There was a major change in the leadership of the College when Mr. D.A. Sinclair resigned in July, 1930 as head of the Art School. Mr. Dudley was appointed in his place. Sinclair had been at the college about fifteen years and had built up the level of work to a high standard. His successor, Dudley, was a talented painter who regularly had pictures hung in the Royal Academy and under his leadership the Art School continued to produce excellent results at all levels.

The remaining three years of Bennett's principalship were uneventful. Of the 1930-31 session he stated, "During the session under review there have

been no new developments in the college" and he went on to complain that not enough youngsters were taking advantage of evening classes. (143) However there were some very creditable results; nine students passed the ONC in Electrical Engineering in 1931 and it was decided to form a class to prepare these students for Associate Membership of the Institute of Electrical Engineers. (144) In 1932 the silver medal of the City and Guilds for Gas-fitting was again awarded to a student from the College. (145)

In November, 1932 Bennett submitted his resignation to take effect from 30th April, 1933, when he reached retirement age. (146) The post of Principal was advertised at £650 to £800 per year with an upper age limit of 45. There were about 60 applicants; 13 were interviewed and from a shortlist of three A.G. Webb, B.Sc. (London), A.C.G.I., A.M.I.Mech.E., was appointed. (147)

With Bennett's departure the last link with the nineteenth century was severed. His principalship was not a distinguished one, but this was almost certainly due to circumstances over which he had no control. The shape of the College had been determined by the policies adopted under Holland, Newport Council was parsimonious in the extreme as far as further education was concerned, Newport and Monmouthshire were continually battling over fees, and for much of the fourteen years he was Principal the area was in an economic depression. It is not surprising that the College was in much the same state when he left in 1933 as it was when he took over in 1919.

The period from 1910 to 1933 saw some of the most radical and far reaching changes that had ever taken place in the history of the nation. In 1910 the British Empire ruled almost supreme, with the nation steadily advancing with the old social system firmly entrenched but prepared to make a few gradual changes. The country was fairly prosperous with industry thriving and the town of Newport, in particular, flourishing. By 1933 although the social order had not changed, for the upper class still held sway, the social structure had.

The Great War was the cause of much of this change. Women had been

involved in tasks previously carried out only by men and they were unwilling to retire once again to their pre-war role of subservience. Men who had never travelled more than a score of miles from their place of birth had seen the horrors of war thousands of miles away in many and varied parts of the world. Such men were no longer prepared to tolerate conditions which had prevailed before the War. Besides Lloyd George had promised them "a land fit for heroes".

Peace brought great hopes and for many in Wales these seemed to have materialised with the short boom in industry. Unfortunately this soon came to an end in 1923, (148) and gradually the economic climate changed, gradually slipping into the Great Depression of 1929 to 1933 (149) in which one of the worst areas was South Wales with its coal industry. (150)

How did further education fare in this time of national upheaval? As in previous periods there was no national pattern - every local authority went its own way, still depending upon the wisdom of its Education Committee to formulate and implement its own policy. The Fisher Education Act of 1918 proposed radical changes with the school leaving age being raised to 15, and compulsory attendance until the age of 18 for one day a week at Continuation schools. Unfortunately the Act was amended to make attendance at the Continuation schools voluntary and the whole scheme collapsed, being introduced only in Rugby. (151)

From 1918 onwards it was only through evening classes at the local technical college that boys in the engineering and building trades had any real advancement in technical education. It was for these boys that the National Certificate Scheme was introduced in 1921. (151) The first one was in Mechanical Engineering and others soon followed. A National Diploma Scheme was introduced, too, but as these courses were full-time they were few and far between. The National Certificate system was the cornerstone of technical education between the Wars (152) and it was on the qualifying part-time students from this system that several of the Engineering Institutions built their

strength. It is sad to see these same Institutions now closing the part-time route to membership.

There is little information readily available on the patterns in other towns as many of the studies of the development of further education have been concerned only with the development in the nineteenth century or the early years of the twentieth century. Where facts are available they show a wide range of developments. In Sunderland where plans for an extension to the college were held up because of the War there was not much expansion of the work until 1920. (153) Between the Wars the work expanded enormously so that there was, in addition to a flourishing engineering section, a very large pharmacy department. (154)

In Gateshead the jumble of classes continued. A Junior Technical School was founded in 1920, but only lasted two years, closing down in 1922. (155) At Southport the plans for a new technical college were hindered by the War.(156) Junior Technical and Commercial Schools were established at the existing Technical College (157) and it is possible that at Southport as well as at Newport further education may have been hindered to a greater or lesser extent by this move.

In Newport, an area hit hard by the depression, further education had stagnated and had been done a great dis-service by the inability of the Borough and the County to agree on further education facilities. There is no record in other works of such disharmony between neighbouring local authorities as existed between Newport and Monmouthshire. That disharmony, coupled with the lack of finance available from the local authorities, meant that by 1933 Newport had lost out and was now far behind the corresponding College in Cardiff. As a result, students in the Borough and in the County suffered and it is a position the town of Newport has never been able to retrieve.

Chapter 5

Revival and Development into a Modern Technical College

1933 - 1956

Mr. A.G. Webb took up his appointment as Principal on 1st May, 1933. He was fourty years old and had been Head of the Engineering Department at Rutherford Technical College, Newcastle-upon-Tyne. (1) He had also had experience in industry. There was an immediate affect on the College. Instead of an old man nearing retirement the College had a young man with plenty of energy and ideas. This can be seen from the minutes of the first meeting of the Technical College Committee he attended. These extended to six and a half pages compared with the customary half a page under the old regime.

Webb told the Committee that he proposed to visit systematically all factories, works and ship-repair yards in Newport during the vacation to establish or re-inforce contacts between the college and industry. He had already been to Hatherleigh school to talk to school leavers and he hoped to visit all the elementary schools. At the College itself he wanted various minor modifications - different times for the afternoon classes, an internal telephone system, and more office equipment. He also proposed to start classes in printing and in metallurgy. (2) In fact, in addition to these two, new classes in Industrial Electrical Practice, Weaving, Copper-welding, and Metalwork and Jewellery were also run in 1933-34. (3)

At the next meeting of the Committee Webb reported that he had visited a dozen firms so far and letters had been sent to all students who had left the High School and the Secondary Schools that summer. (4) As a result of the visits to and contacts with firms the College was given much equipment at regular intervals during Webb's principalship. In November, 1933 he was able to report that six firms had given major gifts or loans of equipment. (5) These gifts encouraged the Committee to spend money on equipment and £800 was given for this purpose by November, 1933.

Webb did not neglect the Art School either. An agreement was made with Breconshire Education Committee to admit students from that county to the Art School (6) and early in 1934 a plan was put forward for the Art School to be the Art College for a specific area. (7) The Press suggested that it

would be a residential college for Newport, Monmouthshire, part of Brecon, part of Herefordshire and the Forest of Dean. (8) Monmouthshire Education Committee decided to give the scheme support, (9) but this was the last that was heard of it and nothing came of the idea.

Perhaps the major event during Webb's first year was the full inspection in November, 1933. The last full inspection had been twenty years earlier. The Inspectors' Report, published in June, 1934, began with a general review of the College and the changes over the past twenty years. The Pupil Teachers Centre had gone as had the Junior Nautical School, but the Junior Technical (1917) and Junior Commercial (1916) Schools had been established. Advisory Committees had been set up "but these seem to have functioned infrequently in the past". (10) Of the students attending the College at that time 88% were from the Borough and 12% from the County. Total expenditure for 1932-33 was £10,374 of which Monmouthshire County Council contributed £550. (10)

The report proceeded to give figures for the past sessions

Session	1928/29	1929/30	1930/31	1931/32	1932/33
Students	823	1037	998	937	976
Hours	175,847	201,798	185,299	180,504	185,253

(11)

These figures are strangely at variance with the corresponding figures from the Principal's reports which were

Session	1928/29	1929/30	1930/31	1931/32	1932/33
Students	975	1,181	1,161	1,104	1,146
Hours	309,497	345,723	350,053	363,485	357,060

(12)

Perhaps the difference is due to the exclusion of the students at the Junior Technical and Commercial Schools, but this is not indicated in the Report, and in one tabulation the Junior students are definitely included. Probably both sets of figures are correct. If the figures from the Report are for senior students at the College it would indicate that the number of students was almost the same as for the immediate pre-war period under Stewart and Bush.

The Inspectors were impressed with the building. "The Authority is to be congratulated on the provision of such excellent premises which are substantially the same as described in previous reports". (13) They did point out certain defects which they felt should be remedied as soon as possible. There was no heating in the basement where the laboratories and workshops were situated; there was no hot water for washing, resulting in dirty exercise books; the accommodation for staff was very poor, particularly for the women staff; there was no provision for students to get a hot drink during their lunch break; there was no library. (14)

They appreciated the fact that the Principal had only recently taken over. "He has taken over a programme of work .... for which he is not responsible. He is tackling his very numerous and different problems with energy and tact and there is already obvious evidence of improvement which augers well for the future. Considerable re-organisation will eventually be necessary and the Principal deserves confidence and support". (14)

After dealing with the Junior Technical and Commercial schools, the Inspectors reported on individual subject areas. They found that the work in engineering was generally satisfactory, with some provisos. The day classes should be more demanding than the corresponding evening classes and not just tutorials; trade and general course students could be prepared for City and Guilds Certificates in Electrical Installation and in Machinists', Turners', and Fitters' work; there was, at that time, no prospect of organising advanced courses leading to Higher National Certificates; the equipment was not as good as it could have been; the laboratories were not heated which was "a condition of affairs which ought not to be tolerated and reflects seriously upon those responsible for its continuation". (15); engineering drawing was not up to the standard it should have been. (16)

The work in Chemistry was severely criticised; the equipment was poor, there were no text-books or reference books and the whole area was badly organised. (17)

The Commerce work was generally satisfactory, but there was room for considerable development of advanced work. However, the French section needed to be re-organised with an up-dating of the content and method of teaching. (18

The Art and Crafts School was doing very good work despite a lack of encouragement from the Governors who were criticised for their infrequent visits to the Art School. The staffing needed to be re-organised with an increase in the number of full-time staff. The women part-time teachers were both efficient and enthusiastic and "the salary they have received is in no way compatible with their labours". (19) The Inspectors were very pleased with the Art section of the work. (20)

Webb drew up a long report of his own in reply to the Inspectors' report. First he stated that the inspection was long over-due; many of the problems had arisen because the "Institution has, to a large extent, been the victim of local circumstances" - and although he did not specifically mention any, several are implied in his comments.

He was not happy with the Junior Schools being in the same building as the Technical College. In his opinion they had been started to provide more use of the Technical Institute building and to avoid setting up fourth year classes in the three Central Schools - saving the Education Committee money. "We realise that the introduction of these young people is apt to act detrimentally on what we would describe as the appropriate work of a Technical College, namely the senior work done by students of an older age".

Many of the matters raised in the Inspectors' report had already been dealt with and others would come before the Governors in due course.

The Institute was lacking in certain modern equipment, Webb stated, but this was something which would cost money to remedy - in the past the Council had been parsimonious - the blame could not be laid at Bennett's feet. The efforts of the committee had been to keep expenditure to the "lowest possible level". He proposed to employ an extra man art teacher and one of the women part-time teachers would become full-time.

He hoped to revise the whole staff structure later when Mr. S.G. Watts retired as Head of Engineering. Watts would be replaced by a graduate with special responsibility for engineering, and a post with special responsibility for commerce would also be created.

Finally he listed all the equipment necessary in the light of the Inspectors' report. He concluded, "We submit this report with a full sense of responsibility of the issues involved. We appreciate that a considerable sum of money will have to be spent, but we feel that, with the thorough overhaul of the equipment and the efforts which have and will be made, the Committee will be prepared to sanction something on the lines suggested, if not wholly, then in part.

You will then have an Institution fitted to play its part in the system of re-organised Technical Education which is foreshadowed in recent developments to enter which should be looked upon as a privilege by the young people of Newport and Monmouthshire.

We visualise a Technical College doing responsible senior work with some research, but we do not think you can expect too much in this direction whilst the Junior Classes are held in the same building". (21)

The Technical College Committee accepted practically all the suggestions made by Webb, but did not reply to his comments on the Junior classes. (22)

The 1934-35 session was one of the best in the history of the college, according to the "Argus". (23) Five new courses had been started, there had been extra equipment both from the Committee and local firms, and new schemes for ONCs in Electrical and Mechanical Engineering had been put forward and accepted. The Mayor, at the prizegiving stated that much of the increase and the better equipment was "due to Mr. Webb who has been untiring in the application of his great energy during the 18 months he has been Principal. He has carried through almost a revolution". (23)

Webb saw the main work of the College as "the provision of systematic courses in full-time day, part-time day, and evening classes, in the principles

and practice of Engineering, Pure and Applied Science and the Arts and Crafts, to meet the needs of the industrial and commercial community of this area". (24)

During this session it was decided that the words "and Institute" should be dropped from the College's title and it was known thenceforth until its demise in 1958 as "Newport Technical College".

The Commerce section began to expand; the Institute of Bankers recognised the College for various papers and it was decided to try to start an ONC in Commerce. (25)

1935-36 saw continued progress; more new classes were started, and more equipment was obtained. At least 25 firms were giving employees day release and the Newport Corporation Electrical Department was giving pay increases to those employees who attended College regularly, had a good term's work record and passed the Grouped Course Certificate. Webb urged more employers to consider this idea. (26)

Mr. S.G. Watts retired in July, 1936 as Head of Engineering, after thirty years at the College (27) and he was replaced by Mr. N.E. France.

The Committee received a shock in December, 1936 when Webb announced that he had been appointed Principal at the new Technical College at Twickenham. (28) * He was at the College for four years and had made a real impact. When he arrived there had been no real growth for years. He re-vitalised the College, re-established and strengthened links with local industry, started new courses, re-organised the administration. His successor states that Webb had done all the hard work of re-organisation and renewal and it was left to him (Harrison) to continue the good work already started. (29)

Webb left Newport in March, 1937 and was succeeded by Mr. F.W.R. Harrison. Mr. Harrison, who was 38 at the time of his appointment, had followed Webb as Head of Engineering at Rutherford Technical College, Newcastle-upon-Tyne and

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*Webb remained at Twickenham until his retirement, and at the time of writing (1979) is a very active 86 year old.

had been acting Principal at that College. He had been an officer in the Indian Navy, had taken his degree as an external London student at Portsmouth and had considerable engineering experience. He had a great deal of drive and energy, and in this respect was similar to Webb, but in some respects he differed. He was very much in favour of the Junior Schools and believed that they in no way hindered the work of the Technical College. (30) He wanted the College to concentrate on the technical and commercial education necessary for local industry and society, and was not in favour of degrees being done at technical colleges. His view was (and still is) that degrees should be taken at University. (31) Harrison was also very active in the local community and was on various Welsh educational bodies as well as becoming a Justice of the Peace, whereas Webb, at Newport and at Twickenham, was not so actively involved outside of College.

During the 1936-37 session the Commercial department became the largest department in the College, but concern was expressed that the Department of Pure and Applied Science had not progressed to the same extent as the rest of the College. (32) Two major events were the submission of a scheme for an Higher National Certificate in Engineering, and the appointment of two representatives from the Monmouthshire Education Committee to the Technical College Committee. In July, 1937 the College was inspected by the Engineering Institutes to see if it met the requirements for HNC courses. (33) A year later the H.N.C scheme for Mechanical Engineering was approved, it being the first in the country to include Metallurgy. (34) The HNC in Electrical Engineering was approved two months later.

Seven new classes were started during 1937-38, resulting in insufficient accommodation, so that some evening classes had to be held at the Newport Secondary School. Harrison asked the Committee to consider extensions to the building and laboratories. (35) As a result a sub-committee was set up to consider some form of extension. There were others who saw the need - the Deputy Chairman of the Education Committee stated that extensions were

necessary if the College was to meet the requirements of the community. (36) Later the "Argus", in an exclusive, reported that important extensions to the Technical College buildings were under consideration. (37) However, by the time deliberations had taken place, the country was on the brink of war, and although various annexes were used for classes no major building projects were undertaken until the Joint College was started in 1956.

Some valuable "link" work was being done with the local schools at this time. It was initially decided that students from these schools who intended to embark on an engineering course at University should do some of their studying at the Technical College. The Education Committee had approved a resolution from the Technical College Committee "that the suggested scheme for the interchange of senior boys between the Secondary Schools and the Technical College be approved subject to the consent of the Secondary Education Committee and to the recognition of such candidates by London University". (38) Pressure was brought to bear from the Secondary Schools which felt that academi work could not be adequately covered at the College, and the scheme was officially dropped. However, students from the schools did attend the more practical classes of the Intermediate Engineering degree scheme.

The 1938-39 session seems to have been one of consolidation. The Higher National Certificates in Mechanical and Electrical Engineering started, the Art results were particularly good and the metallurgy classes continued to flourish. The College staff had, by this time, built up to 22 full-time and 61 part-time members. (39)

The outbreak of war in September, 1939 had a serious effect on the College. Evening classes started four weeks late, numbers were down with Art School numbers particularly hard hit, and there was general disruption. But despite the difficulties the work continued, even to the extent of classes being continued in the ducts of the Plenum heating system during air-raids. The Plenum heating system had been an innovation when the building was first opened and had never worked very efficiently - but it did provide useful air

raid shelters!

During the year 1939-40 the first batch of HNC students completed their courses; six were successful in Mechanical Engineering and six in Electrical Engineering. (40)

In December, 1939 an article appeared in the "Argus" which suggested Newport and Monmouthshire should have its own University College. The main reason for this was the fact that advanced classes in Metallurgy were to be held in Newport rather than in Cardiff. (41) It appears that initially this was the scheme which was agreed by Cardiff and Newport, but, according to the article in the "Argus", Cardiff reneged on the agreement by trying to run the advanced metallurgy course as well. There was a suggestion that Newport should withdraw from the Advisory Council for Technical Education in South Wales and Monmouthshire, as it was this Council which had ruled that the advanced courses should be done in Newport. The Newport Borough Treasurer had strong words to say on the matter. He thought that Cardiff wanted all the advanced courses and the problem over metallurgy was a continuation of the "monkeying" by Cardiff which had started about fifteen years earlier. (42)

Harrison believes the situation was settled amicably, (43) but Cardiff did retain some of the metallurgy work. The Technical College in Cardiff was already offering degrees in engineering, and this further demonstration of the muscle of Cardiff even in the face of adverse decisions by the Advisory Council was another nail in the coffin of any hopes Newport might have had in establishing a degree awarding college.

The 1940-41 session saw the College becoming involved with courses connected with the war effort. A special course was run for the Ministry of Labour for machine operators and fitters, (44) and staff were busy in their own time, including Sundays, manufacturing machine components. More firms were giving their apprentices day release. This applied especially in the engineering field. At the end of the session Mr. W.H. Dudley, who had been ill for some time, retired as Head of the School of Art. He had made

a major contribution to the Art work and had helped to maintain the high standard by encouraging others to reach his own high level of achievement. (45) He was succeeded by Mr. H. Lea, who continued the good work. It was a good year for examination results with the City and Guilds performances being the best for many years. (46)

1941-42 was a year when the level of work, student numbers, and student hours were kept to those of the previous session, with many classes being run for the forces and various Government ministries. During the year Harrison was appointed to the Advisory Council for Post-War Construction in Wales. (47)

There was a large jump in student hours in 1942-43 due to an increase in full-time students attending under various forces' training schemes. The most important of these was the twenty-one month course for engineering cadets. This was a graduate equivalent course and was very successfully run at the college with 38 of the 46 students passing. (48) It was a good year generally, three students gained Associate Membership of the Institute of Mechanical Engineers, one student was awarded an external London B.Sc., and top place in City and Guilds Gasfitting was achieved by a College student. In addition there was good work being done in Art despite a big drop in the number of full-time students. (49) Classes during the summer term continued to expand.

The next session was again a successful one. The work in Chemistry was developing with the introduction of a course for an external degree in Chemistry. The Engineering Cadets course had meant that the engineering workshops had been practically re-equipped with modern machine tools. This encouraged the Education Committee to discuss the possibility of an Engineering degree being run at the College. (50) After further discussion at the Technical College Committee the issue was dropped and nothing further happened. On the administration side it was decided to set up Advisory Committees in Engineering, in Commerce and in Building. (51) These were made up of equal numbers of employers, employees (Union members) and Education Committee members with the Director of Education and Principal as ex-officio members. (52) There

is, however, no indication that these Advisory Committees were any more useful than their many predecessors.

In May, 1944 it was decided to employ an extra full-time lecturer in engineering. It must have been disappointing, therefore, when in July, 1944 the Committee was told that R.A.F. cadets would no longer be trained at the College because, although the College was very good, the billets for the cadets were not up to standard. (53) Despite this loss of full-time students, overall student numbers were up by almost 200 although student hours were down by about 30,000 hours.

The 1944 Education Act placed on every Local Education Authority the statutory duty to provide "adequate facilities" for Further Education in its area, further education being defined as full-time or part-time education and leisure time occupation for persons over the compulsory school leaving age. County colleges were to be set up for 15 to 18 year olds, who would attend one day or two half days per week, employers being bound to release them. These colleges were to be set up within three years of April 1st, 1945. (54)

These intentions for further education were very good, but as with the Fisher Education Act (1918) they have never been fully implemented. In Newport the Act affected further education mainly in two ways. First, the fees for pupils under eighteen years of age were abolished, (55) and secondly the number of students increased so that by 1948-49 there were 3,194 compared with 2,154 in 1944-45, an increase of about 50 per cent. (56) An area in which there was a marked increase was the day-release students, clearly a result of the 1944 Act.

By early 1945, the Committee was able to report that the College was "on its normal curriculum for the first time since the middle of 1940". (57) During the 1944-45 session day release for Commercial students was started, but this scheme was very reluctantly accepted by employers in the area and it was many years before it was used to any great extent. However, in the

Engineering area day release was becoming more and more accepted, so that in 1944-45 296 out of 598 engineering students were given day release, and these numbers meant a new mechanical engineering laboratory had to be commissioned during the year. In general, it was a successful year with Chemistry and Metallurgy classes doing particularly well. In Metallurgy Phyllis Cox was awarded the Bronze Medal for the City and Guilds Intermediate Metallurgy Examination - a rare achievement for a girl in those days. An ONC in Building was approved, but the Principal reported that the development policy of the College was being hindered by lack of accommodation. (58)

The increase in numbers meant extra staff had to be employed and during the summer of 1945 three extra members were appointed, one in engineering, one in commerce and one in art. (59) There was also the suggestion that a four storey building should be erected to cater for the increasing number of building students (up 80 per cent in ten years (60)) and the Principal was asked to visit a suitable building school with the Borough Architect. (61) No new building was put up, but an old primary school in Bolt Street was converted to take the building courses.

At the end of the War the Principal reported on the extent to which the college had been used for special war-time courses. The main ones had been

(i) Ten eight week courses for training turners and fitters; 233 trained

(ii) Six six week courses for the A.T.S.; 142 trained

(iii) One 21 month full-time course for 46 students on the Engineering Cadet Scheme; 38 successfully reaching the Engineering degree standard

(iv) Three six month full-time courses for R.A.F. cadets; 150 trained

(v) Two six week full-time courses for Army trainee clerks; 50 trained

In addition, various other short courses had been run, and the staff had done much extra work in their own time. For example, the engineering staff had manufactured vital components and the art staff had drawn large scale maps

for use by the R.A.F. (62)

The 1945-46 session saw the College almost back to normal. The number of students in the Art School was back to the pre-war level. A special ONC course was run for Commerce students, and various successes were recorded in City and Guilds examinations. (63) During the year Harrison was appointed as a representative of Technical and Commercial Colleges in Wales on the Wales Regional Committee set up to administer the business training scheme. (64) He was also co-opted on to the Newport Education Committee from March, 1946.

Early in the 1946-47 session a joint meeting of the Advisory Committee decided to try to obtain day release for young people other than apprentices - commercial students, shop assistants and so on. (65) By May, 1947 the day release position was 247 in Engineering, 182 in Building and 27 in Commerce, (66) and in his report for the session Harrison complained about this lack of support for the Commerce courses. Also during the year the ONC in Metallurgy scheme was approved. (67) Numbers were so great that some day classes had to be held in Lyne Road, and some evening classes at the Stow Hill Secondary Modern School. Despite the pressure on accommodation, good results were obtained, particularly in the National Certificates and City and Guilds examinations. In July, 1947 the College was approved by the Royal Institute of Chemistry, with which it was associated, for courses. (68)

Major administrative changes took place in 1947-48 with the building trades section becoming a department in its own right, within the School of Art. (69) When ONC results were published for the previous session in November, 1947 it showed successes in the ONC in commerce for the first time, but later in the session the course had to be abandoned because of insufficient numbers. (70) To offset this the College was approved by the Welsh Advisory Board for Technology as one of the two Colleges in South Wales for advanced Metallurgy courses, (71) and in 1949-50 an HNC in Metallurgy was offered for the first time.

The growth continued in 1948-49. New courses were put on including a

nine-month full-time ONC in Mechanical Engineering for ex-servicemen, and an ONC in Chemistry. (72) Numbers were up by over 300, with 85 full-time art students and satisfactory progress, except for day release classes, was made in Commerce. Advanced courses were being run in the Commerce department, such as the Diploma in Public Administration, but these courses depended on evening students. The work in the School of Art continued to be of a high standard with students regularly obtaining National Diplomas in Design, a degree equivalent qualification.

During the summer of 1949 two important developments took place. New laboratories were opened for Metallurgy, Chemistry and Bakery, enabling work in those areas to progress during the following session, (73) and the Education Committee was invited to send a deputation to meet representatives from the Ministry of Education and the Monmouthshire County Council Education Committee to discuss the provision of Technical Education in Newport and Monmouthshire. (74) This was the first of a series of meetings which led to the provision of the Joint College - the Newport and Monmouthshire College of Technology - which was to take over all advanced work from both Borough and County.

By 1949-50 numbers were up to 3,518 with 37 full-time and 116 part-time staff and day and evening classes having to be held at three sites outside the main college building. It was a year of consolidation with few new courses run, but increased numbers in most classes, particularly in day release Commerce. (75) During this year Harrison was appointed to the Welsh Joint Education Committee as the representative of Technical College Principals, (76) and made a Justice of the Peace. (77)

A Vice-Principal (Mr. T. Walker, Head of the Commerce Department) was appointed for the first time in 1950-51, which proved to be a record year for the number of National Certificates in Engineering with 63 awarded. Again developments were being curtailed because of limited accommodation. (78) This may have been the reason why attendance at the Commerce department evening

courses was poor and why overall numbers fell slightly.

At the end of the year the Education Committee set up a Further Education Committee to have oversight of all further education in the town and the role of the Technical College Committee was handed over to the Technical College Governors. The Further Education Committee stopped dealing with Technical College minutes in July, 1952 and became mainly concerned with grants and awards. Thus the Governors of the College had a greater say in its running from July, 1950.

There was renewed growth in 1951-52 with over a thousand students in the Engineering department for the first time. The Ordinary National Certificates were being run with the minimum amount of equipment because there was no room for more, but despite this they continued to grow. The ONC in Commerce, however, continued to struggle and support continued to be lacking in this area. In January, 1952 a request was received from the Steel Company of Wales asking that apprentices attending Cardiff Technical College for the Instrument Technician Course should transfer to Newport. The Principal told the Governors that such a course would be provided in September, 1952. (79)

The major event of the 1952-53 session was a full inspection of the college in November, 1952. The subsequent report commented on the increase in the proportion of students from the County. In 1951-52 33 per cent were from the County compared with 20 per cent in 1947-48 and twelve per cent in 1932-33. (80) It also pointed out that 33 per cent of students at the college were women.

Some of the defects from the previous inspection were still outstanding. There were inadequate staff rooms, no canteen, no cloakroom and toilet facilities for female staff and no college library. These were, without doubt, major defects and had not been remedied over the nineteen years since the previous report, but one cannot see how they could have been remedied with the space available and student numbers more than tripling. It was a physical impossibility. The inspectors were satisfied with the equipment but

much of the furniture was old and needed replacing. (81)

The report was complimentary about the standard of work in Art but felt that an Advisory Committee should be set up. (82) Several suggestions were put forward for the Building section. It should be completely separated from the School of Art; the possibility of an HNC in building should be investigated; there was a need for more equipment and the replacement of the existing equipment. More assistance was needed at the technician level and a Building Advisory Committee should be set up. (83)

The Engineering department was complimented on its success and criticised for the results! "In offering this range of engineering courses the college has gone beyond its ability to operate the courses efficiently with a sufficient range of practical work .... The difficulties of the Department stem from its own success, and are the more serious in that they have developed simultaneously in several directions. The classes are both numerous and large, some rooms are both small and ill-equipped, some teachers are overloaded with teaching and harassed by insufficient laboratory help. The College has stimulated industrial support which has run ahead of its ability to satisfy the consequent demand". (84) The equipment was not as good as it should be due to the lack of technicians to maintain it. With improvements the workshops could be made to serve until the new college buildings were available - but it was not a very satisfactory situation. (84)

In the area of Commerce there was considerable room for expansion in all directions, but this would need effort with the attitude prevailing towards day-release for the subject at the time. Within the department there were competent and inefficient teachers, but the situation was not improved by inadequate accommodation. (85) It was disappointing to see the lack of support for the ONC in Commerce and the Inspectors were particularly unhappy about the lack of library facilities for Commercial students. (86)

The Science department was complimented on the steady progress that had been made, but the standard criticisms were made here too; more technicians

were needed, accommodation was poor and extra equipment should be purchased. (87)

The work of the College progressed steadily through the 1952-53 session with 81 National Certificates, 186 City and Guilds Certificates and 120 Royal Society of Arts Certificates being awarded as well as various Ordinary and Advanced level School Certificates. A great deal of excellent work was being done in the School of Art with both staff and students exhibiting their work locally and nationally. (88)

1953-54 was a record year for successes in the National Certificates with 40 HNCs and 72 ONCs being awarded. It was also a record year for the number of students being given day release, 1405 compared with 456 in 1946-47, a particularly pleasing aspect being the increase in the Commerce department. (89

With each succeeding session the accommodation problem became more acute. In 1954-55 it was the motor mechanics and electrical installation classes which suffered most from this problem. Again there were successes, the most note-worthy this session being the first two HNCs in Building and the nine National Diplomas in Design. (90)

Student numbers passed four thousand for the first time in 1955-56. The work continued to consolidate existing courses, but again the Principal, in his report, had to state that, as far as the Commerce department was concerned, "no marked increase in the successes in the National Certificate and professional examinations can be expected unless employers are prepared to give more day release". (91)

The 1956-57 session was the last one Harrison was Principal at the College. In May, 1957 he was appointed Principal of the new Newport and Monmouthshire College of Technology. (92) During the year, classes had to be held at six sites other than the main site at Clarence Place. Despite this handicap the work continued to expand, with the Licentiateship of the Institution of Metallugists course being run for the first time. There had been no increase in day release in the Commerce department, but in the School

of Art the Leverhulme Trust Award for Art, an award open to all Art students in Great Britain, was won by Keith Underwood. The award was worth £500 and twelve months study in France. Other art students were successful in gaining entry to the Royal School of Art, and six others were awarded National Diplomas in Design. (93) Another interesting achievement was the award of the South Wales Institution of Engineers scholarship for the most promising Engineering student to Joan Davies, the first girl to receive it. (94)

Harrison had been Principal since April, 1937 and had seen student numbers increase from about 1,600 to well over 4,000, more than 250 per cent increase. Circumstances were in his favour - he succeeded Webb, an excellent man who had put the College on the right lines, and the whole attitude to further education had changed nationally and locally. Harrison was a man of vigour and leadership; the whole town, college and Council knew he was Principal, and that he was a man who got things done his way. He built the work up to a commendable level in most areas, but the Commerce section did not achieve the same level as the other departments did. Clearly attitudes in the town did not help, but perhaps these attitudes were re-inforced by the possibility that Harrison was not quite as interested in this area as in the others. As far as the Art work was concerned he left this in the hands of Dudley and then Lea, two very competent Heads of the School of Art. He told them he wanted them to ensure "discipline and punctuality" (95) among the Art students, and he backed to the fullest extent any requests they made for equipment and staff. As a result the Art work prospered.

Harrison did not, and still does not, believe that degree courses should be run other than at University. (96) This meant that at a time when other colleges were putting on external London degree courses, Newport offered very little at that level. Later, when the time came to decide where the Polytechni of Wales should be situated, Newport was not in as strong a position as it could have been. Perhaps, however, Harrison was right, and there was not the demand or desire in the area for a college offering degrees.

The final session of the Technical College, 1957-58 was not an easy one. Mr. J.C. Winter had been appointed acting Principal in June, 1957 with Mr. L. McGraghan as acting Vice-Principal. (97) During the year various members of staff were transferred to the new college, McGraghan leaving at the end of 1957 to take up the post of Head of Science at that College. (98) Consequently Winter reported, "This Report may be considered as the last Report of the College, for during the session so many changes were made in the work and aims that it is no longer carrying out the functions for which it was originally brought into being". There were shortages of staff in some areas and consequently some results were not up to the previous years' standards. (99)

Thus, at the end of 1957-58 session the Newport Technical College ceased to exist, being replaced by the Newport College of Further Education which did the "low level" work of the old college, the Newport and Monmouthshire College of Technology which did the "higher level" work from the old college and from the Technical Colleges in the County, and the Newport College of Art, which was the School of Art and Crafts from the old college.

Many important and far-reaching changes took place in the United Kingdom between 1933 and 1958. The change between 1933 and 1958 was as great as or greater than the change between 1910 and 1933. In 1933 the country was just beginning to emerge from the great depression, and with the change in the economic climate and the effects of the Second War, the latter years of this period were ones of full employment and increasing prosperity for the majority of the population.

Attitudes to education were changing, too. The provision of education between the ages of five and fourteen was no longer seen as being sufficient to meet the life-long requirements of the individual, nor did it meet the development needs of the country. It was seen that further and higher educatio was an essential element of the future development and prosperity of the country. The 1944 Education Act imposed the statutory duty on Local Education

Authorities to provide adequate facilities for further education, that is, full-time and part-time education for persons over compulsory school age. (100) Although the 1944 Act was concerned with education at all levels, it resulted primarily in the concentration of expenditure in the primary and secondary school areas. Probably its main effect in further education was the large increase in the number of day-release students, so that by 1955 there were five times as many as in 1932. (101) There was a three-fold increase in full-time students in further education over the same period and the result was that most colleges of further education had annexes of various sorts and suitability.

Although there was some guidance from central Governments Local Education Authorities continued to follow their own paths in further education. Thus, in Sunderland, for example, no courses in commercial work were started at the college until 1953, but such was the strength of the other sections of the college it was designated a Polytechnic in 1969.

In Southport a new building was started in 1937 but it was not completely finished until 1957 and, as in Newport the work was hindered by the lack of a building of the right size at the right time. (102)

At Gateshead further education continued to be the mixture as before, but eventually in 1954 a technical college was opened. (103)

A particular problem area in further education over the period was the education and training of commercial students. An ONC in Commerce was introduced in 1935 but this never proved very popular because of the reluctance of employers to release employees. In 1949 the Carr-Saunders Report on Education for Commerce stated that there was an urgent need to improve the quality and quantity of commercial education - but this report made very little impact on the country which was concerned more with the need to expand industrial production. (104) The problem continued for many years and even in 1966 only eight per cent of office staff under 21 were being trained. (105) Thus the training of commercial students was a national problem

not one which Newport alone faced.

In England and Wales in 1946/47 there were 768,000 students in further education, and this had risen in 1956 to 1,269,000 an increase of 65.23%. In Newport in 1946/47 there were 2,327 further education students; in 1956 there were 3,844, an increase of 65.19%. Thus the growth between 1946/47 and 1956 is almost identical between Newport and the country as a whole.

Thus as an era in the history of further education in Newport came to an end it can be seen that Newport represented a typical position in further education. With the diversification of further education in the town in 1958, a new "golden era" had dawned, but the development of this must be left to someone else to trace.

Conclusion

Further education has developed along several main paths, but for almost every town or city in which there is now an institute for further or higher education the path has had different twists and turns, depending on local funding, local industry and the attitudes and personalities of the men in charge. This seems to have been the case in those places where the development has been traced. Towns such as Cardiff, Bristol, Huddersfield, Carlisle, Middlesborough, Southport, Sunderland, Gateshead, and Warrington all took varying paths to reach their present further educational position. Some have achieved more than Newport; some have achieved considerably less.

What was the legacy of the Mechanics' Institute movement? There is considerable disagreement among experts. Bristow (op. cit. p 138) claims "They were the progenitors of technical education and they left behind them a splendid legacy", but it is not clear from the context to which Mechanics' Institutes he is referring, nor what the splendid legacy was. Kelly (op. cit. p 200) is not so sweeping, "They" (the Mechanics' Institutes) "perished, but they left behind a legacy of useful public institutes".

Robert Peers ("Adult Education", Routledge and Kegan Paul, 1972) states "The movement failed as a whole ultimately to fulfil its original purpose" (p 17), but does add "In the second half of the century, those Mechanics' Institutes which continued to serve any genuinely educational purpose became indistinguishable from a variety of institutions providing facilities for what is now described as further education" (p 19).

Argles ("South Kensington to Robbins, Longmans, 1964) agrees "The mechanics' institutes failed, although in some of them lay the germs of a later crop of technical colleges". (p 13) Gregg (op. cit) and Jones and Pool ("A Hundred Years of Economic Development", Duckworth, 1940) take the same view.

The author of this work has come to the same conclusion as most of those quoted that the Mechanics' Institute movement failed, in most cases, particularly in Wales and the South of England, to provide a platform for further education.

The one in Newport survived longer and had more impact than many others in South Wales and in the country. The people of Newport should be proud that the Mechanics' Institute in the town lasted as long as it did and that it provided a more than useful initial contribution to the Public Library which is now such a valuable asset to the town. Many of the officers of the Institute gave many hours of their time to the Institute as well as financial help but they failed to realise that to succeed as an educational institute they needed to provide the classes the people needed at a price they could afford, taught by men whose job was teaching. The classes they provided did not appeal to the working man whose main need was classes in reading and writing English rather than lessons in French, Spanish or even Welsh. A middle class man could afford sixpence or a shilling for a class, but to the majority of the population this amount was a sizeable part of his weekly wage. The Mechanics' Institute in Huddersfield was one of the few Institutes which seems to have achieved the right balance of classes and thus was comparatively successful.

Another reason for the failure of the Newport Mechanics' Institute to achieve much educationally was the lack of financial support given by the gentry in the area (with a few notable exceptions). In Newport there were no wealthy philanthropists such as the Wills family in Bristol or the Carr family in Carlisle. The struggle to keep solvent meant that more attention was given to entertainment than to classes in order to raise money.

How did the Newport Mechanics' Institute fit into the national pattern of such institutes? Most Mechanics' Institutes were set up either by groups of keen working men - as described by Samuel Smiles - or by philanthropic professional men. Newport followed the second path. Where the emphasis was on classes of the right standard for the right people at the right price, for example in Huddersfield and Manchester, they flourished in general. Where the emphasis was on lectures - which gradually became entertainment - Mechanics' Institutes struggled and in most cases folded within a few years,

for example, Cardiff and Sunderland. Again Newport followed the second path, but such was the determination, enthusiasm and devotion of many of the officers of the Newport Mechanics' Institute that it had a much longer life than most other Institutes which took this path.

The period under the Free Library Committee was the real start of further education in Newport and by 1890 there was a well established work pattern. However, Newport was already being left behind by Cardiff and there are several reasons for this. Cardiff was, at the time, becoming the main centre in every respect in South Wales. The University College had been set up and its very presence probably helped further education in the city. Again, in Cardiff there were various learned societies; in Newport there were none except for the Newport Natural Science Society which existed for a few years in the 1880's. By the mid 1890's there were 1895 students at the Technical School in Cardiff, whereas in Newport there were only about 300. Further education in Cardiff seems to have divided into different sections at an early stage so that each could develop separately. In Newport the whole of further education remained under the control of William Bush until 1898 and it is clear from the data that Science and Technology suffered at the expense of Art as a result.

In most other towns there does not appear to have been the friction and constant wrangling between the local authority and the further education administrators that there was in Newport. The long period of hostility between Bush and various influencial men on the various committees under which he served must have hindered the work - the main concern seems to have been to score points off one another - and further education lingered in the most inadequate conditions and accommodation. Some of the major protagonists in these struggles knew very little about further education and never made an effort to find out more. These were the men who helped to make the major decisions about further education in the town.

Perhaps the most serious short-coming of the committees during the period

up to about 1895 was the reluctance to make use of the Hewertson Bequest. To leave the money idle was almost criminal and certainly far from what the donor intended. It could have been a very substantial part of the cost of a new building and had it been used for this instead of lying idle for over twenty years, who can say what might have happened to further education in the area. The committees did nothing then, and unfortunately this inability to make a decision in a reasonable time can still exist and can still hinder the work today.

The period when Stewart was in charge of Science, Technology and Commerce is, perhaps, one of the most successful in the history of further education in Newport. From 1898 to 1915 Stewart built up this side of the work to the extent that not an inconsiderable number of pupils gained external London degrees through their studies at the College. He battled gallantly during a period when accommodation was totally inadequate and yet excellent results were obtained, with an increasing number of students. He was a man who was far-sighted and knew what was happening in further education in other parts of the country. If the committee had acted on his suggestions, there is no doubt in the author's opinion, that further education in Newport would have developed more quickly and perhaps differently.

Stewart also had time for the individual student, and many of the things which Holland, as Principal, proposed and achieved Stewart had already outlined years previously. He had no alternative but to resign when Holland was appointed Principal and thus Newport discarded one of its most able and loyal servants.

It was during this period, too, that Newport had its one real opportunity to obtain a University College. If, in 1904, the Town Council had been prepared to spend money to the same or greater extent as Swansea this could have been achieved. The fine building at Clarence Place was years ahead of the equivalent one in Cardiff, but even so it was built too late. The reluctance of the Town Council to spend money on further education in Newport

has been one of the main reasons for failure to achieve in Newport what has been achieved elsewhere. Further education was robbed of the "whiskey" money to which it was entitled, and the Council was always very reluctant to raise money on the rates although it had the authority to do so. This lack of money continued to hinder the work until the Principalship of Webb (as he reminded the Committee in his reply to the Inspectors' Report of 1934).

The second main reason for failure was the lack of co-operation between the County Borough of Newport and the County of Monmouthshire on further education. If only they had met in 1891 when Monmouthshire suggested co-operation on matters of common interest. Instead there was disagreement and friction for forty wasted years. During that time Cardiff and Glamorgan were co-operating and the result was a thriving, progressive Institute in Cardiff by 1933 whereas in Newport the Technical Institute had stagnated and had progressed very little from its position in 1914.

Nationally from 1870 to 1914 there was even wider divergence in further education than during the time of the Mechanics' Institutes. Each local authority acted as it thought best. Most, like Newport, took no direct role in further education, until compelled to by the 1889 Technical Education Act and even then many acted with greatest reluctance. However few were as higgardly as Newport. Many neighbouring local authorities began to co-operate over further education, but in this area Newport and Monmouthshire failed completely.

Further education is said to be the educational field in which the entrepreneur flourishes most readily. Until 1914, however, most local authorities, through their education committees, firmly held the reins of further education, and there is little evidence that there were many entrepreneurs in further education prior to 1914. Certainly in Newport neither Bush nor Stewart could be classed as such.

Under Holland the commerce work expanded and the Junior Technical Schools were set up. These Junior Schools could well have had an adverse effect on

further education in the town. Webb certainly thought so; Harrison did not agree with him. It would appear that in other places where there were such Junior Technical Schools they were either separate from the Technical College or were separated after a fairly short co-existence. In Newport they were housed in the Technical College because it saved money in that it meant that fourth year classes did not have to be set up in the Central Schools. Also it was one of Holland's suggestions, and as Holland was an entrepreneur "par excellence", his proposals were almost invariably accepted by the Committee.

Bennett was Principal during one of the most difficult periods for further education in Newport. He was under constant pressure to economise for the whole period of his principalship and he never had an opportunity to put into effect any ideas that he may have had. He cannot be blamed for the lack of progress from 1919 to 1933. Lack of finance and the failure of Newport and Monmouthshire to co-operate made his position a most unenviable one.

The period from 1914 to 1933 was a difficult one for further education nationally and Newport was no exception. The Great War brought to a stop many developments as in Southport, and in Newport plans for full-time classes were delayed. After a brief boom immediately after the War economic depression hit the country. Numbers in further education fell generally, particularly in those areas worst hit by the depression. Most local authorities cut back on expenditure but some were prepared to expand the work such as in Sunderland. Newport followed the pattern of the majority, so that by 1933 numbers in Newport were at the same level as in 1914.

Webb, perhaps a more forceful person than Bennett, seems to have devoted the whole of his time to the College, and he laid a firm foundation for Harrison to build on.

The financial position had improved by the time Harrison took over, and the whole climate towards further education seems to have changed. Clearly much of the growth under him would have occurred no matter who had been

Principal, but there is no doubt that he had drive and has a personality which is very dominant. It was almost always his ideas and suggestions which won the day and he did much to make further education in Newport what it is at present.

A great change in the economic climate took place between 1933 and 1958, complemented by a change in attitude to further education countrywide. Until the 1944 Education Act there had been little or no national policy on further education and Newport went its own way as did every other local authority. Occasionally the Education Department (or its equivalent) intervened in local disputes such as the one between Newport and Monmouthshire over fees.

From 1933 to 1944 the work in Newport expanded and this seems to have been the national picture. In Harrison the town had a typical further education entrepreneur and in other authorities where there were such men the work expanded. From 1944 to 1958 further education expanded explosively, mainly due to provisions in the 1944 Education Act. As was seen in chapter five the growth of further education in Newport and nationally was almost identical. The problem with the education of commercial students was also not confined to Newport - Carr-Saunders reported that the training of commercial students was a national problem.

It seems, therefore, that in general, the pattern of further education in Newport followed the national pattern wherever such a pattern existed and its development can be regarded as fairly typical of the general development of further education in the country.

If we consider higher education to be distinct from further education then Harrison's ideas on this have again had an effect on the position in Newport. His belief that degrees should only be done at University may have meant that opportunities were lost for degree courses at the Technical College and almost certainly this was the case during his Principalship of the Joint College, the Newport and Monmouthshire College of Technology.

At the end of the 1957-58 session students in Newport were able in further education to study a vast range of subjects. They had an alternative to school after the age of 15 with technical, scientific and commercial

studies being catered for. Art education was excellent with a good national reputation. For full-time higher education the student had to leave the town, but in general Newport could be fairly satisfied with its further education provision.

Today the position has changed. There is now a provision for full-time higher education in some subject areas in Newport at the Gwent College of Higher Education, and this is probably an advance. There is an even wider range of subjects being offered at the College of Further Education but there is one area where the population of Newport is probably worse catered for than in any period in the last sixty years. That is the provision of an alternative to school for the more able student after the age of 16. The College of Further Education provides one year courses for "A" level subjects, but the pupil who is unhappy at school but wishes to continue with "A" levels, and the student who left school at 16 and wants to return to study has no opportunity in Newport to obtain "A" level qualifications over a two-year course. In this Newport is worse off than it was and worse off than most other towns of comparable size.

One of the aims of this thesis was to show why Newport does not have a University or Polytechnic. Certainly the opportunity has existed to set up such an institution. However, Newport does not have one primarily for two reasons - first the failure of Newport and Monmouthshire to co-operate on further education at an early stage. Co-operation was forced upon the two authorities in the early 1930's and any joint work proceeded with each seeing how much it could get from the work with the minimum output. Secondly Newport, in particular, was not willing to provide the necessary money - the financial gains of a University College were not considered - the authority could only see the immediate financial cost, the amount of money it would put on the rates and the number of votes lost as a result.

Consequently Newport does not have a University or a Polytechnic, but a College of Higher Education, the result of an unbalanced amalgamation of a College of Technology, a College of Art and a College of Education. It will be interesting to see how this College develops in future years.

Appendixes

Appendix 1

Lectures given at the Newport Athenaeum and Mechanics' Institute, 1841 - 1870

First Year 1841 - 1842

11/5/41 (?)	Ancient Philosophy	Rev. D.R. Stephens
15/6/41 (?)	Modern Philosophy	Rev. D.R. Stephens
?	The Origin of Alphabetic Writing	Mr. G. Pryce
13/7/41	Druidical Temples and Other Stone Erections of the Ancient Britons	Mr. G. Pryce
28/9/41	The Welsh Language	Rev. D.R. Stephens
23/11/41 (?)	The Art of Painting	Mr. S.J. Evans
?	Galvanism and the Electrotype	Mr. E. Rogers
14/12/41	The Pursuit and Attainment of Knowledge	Mr. W.D. Evans
28/12/41	Popular Superstitions	Rev. J. Francis
11/1/42	The Economy of Bees	Mr. J. Slater
?	Obstacles to the Diffusion of Knowledge	Mr. W.W. Morgan
22/2/42	Geology - The Mineral Basin of South Wales	Mr. A.O. Davies
28/3/42	Geology	Mr. S.H. Blackwell
29/3/42	Geology	Mr. S.H. Blackwell

Second Year 1842 - 1843

2/5/42	Chemistry	Mr. E. Jenkins
9/8/42	The Rise and Progress of Architecture	Mr. P. Bevan
23/8/42	The Study of History	Mr. D. Carter
16/11/42	Carboniferous Formations	Mr. W. Llewellin
29/11/42	The Use and Abuse of Books	Rev. D.R. Stephens
5/12/42	French Literature - a lecture read by	Mr. W. Christophers
13/12/42	Literature and Belles Lettres	Mr. D. Carter
25/1/43	Poetry	Mr. Lowry
?	2 lectures on Chemistry	Mr. Haigh

?	The Larynx	Rev. J. White
?	The Human Frame	Dr. L. Reynolds
11/ 4/43	Hebrew Poetry	Rev. T. Parry

Third Year 1843 - 1844

12/ 9/43 etc	3 lectures on English Poetry	Rev. E.P. Hoad
21/11/43	The Life, Character and Opinions of Socrates	Rev. D.R. Stephens
28/11/43	The History of History	Mr. C. Cummins
?	The Character of Shylock in "The Merchant of Venice"	Mr. C. Cummins
5/12/43	The Use, History and Various Kinds of Poetry	Mr. T. Lotherington
26/12/43	Geology	Mr. S.H. Blackwell
?	Air and Water	Mr. T. Sibley
?	Davis' Prize Essay, "The Evils of the Present System of Late Hours of Business" - read by	Mr. E. Thomas
27/ 2/44 29/ 2/44 5/ 3/44 6/ 3/44	4 Lectures on Astronomy	Dr. E. Henderson, F.R.S.
7/ 3/44	Popular Arithmetic and Geometry	Dr. E. Henderson
19/ 3/44	Alimentation	Dr. M. Cussen

Fourth Year 1844 - 1845

30/ 4/44	Ancient Shipbuilding	Sir Samuel R. Meyrick
12/11/44	The History of Opinion	Rev. D.R. Stephens
8/ 1/45	The Economy of Public Health	Mr. W.D. Evans
15/ 1/45 21/ 1/45	2 Lectures on Chemistry*	Mr. E.V. Jenkins

*These included the mandatory experiment with laughing gas

Fifth Year 1845 - 1846

13/ 5/45	Decision of Character	Mr. J. Batchelor
?	Thoughtfulness	Rev. D.R. Stephens
3/12/45	Eloquence	
20/ 1/46	Character	
?	2 Lectures on The Crusades	Rev. T.L. Bright
?	Printing	Mr. W. Christophers
9/ 2/46	5 Lectures on Mesmerism	Mr. Hicks
11/ 2/46		
13/ 2/46		
17/ 2/46		
3/ 3/46		
4/ 3/46	Poets of the Poor	Mr. Turner

Sixth Year 1846 - 1847

23/11/46	My Travels, Bokhara, etc	Dr. Woolf
24/11/46		
25/11/46		
?	The Communication and Transmission of Thought	Rev. T.L. Bright
8/12/46	The Press	Mr. W. Christophers
15/12/46	The Chemistry of Natural History	Mr. W.H. Michael
?	?	Mr. Turner
9/ 2/47	The Characteristics of the Age	Mr. G. Dawson
16/ 2/47	4 Lectures on Mesmerism	Mr. S.T. Hall
17/ 2/47		
18/ 2/47		
?		
23/ 2/47	The Application of Science to the Domestic Arts	Rev. T.L. Bright
30/ 3/47	The Manufacture of Paper	Rev. W. Allen

?	2 Lectures on Electricity	Mr. L. Percival

Seventh Year 1847 - 1848

6/ 7/47	Musical Soirée - Melodies of South and North Wales	
2/11/47	The Agencies of Civilisation	Rev. T.L. Bright
16/11/47 17/11/47	2 Lectures on the Mechanics of Animal Physiology	Mr. W.H. Michael
22/11/47 23/11/47 24/11/47 25/11/47	4 Lectures on the Beauties of Geographical Science	Mr. J.H. Buck
22/12/47	The Philosophy of Labour	Mr. E. Burritt
4/ 1/48	The Moral and Intellectual Influence of Women on Society	Mrs. Clara L. Balfour
5/ 1/48	Women - a Patroness of Literature	
8/ 2/48	The Peculiarities of Great Men	Rev. W. Allen
22/ 2/48	Michael Angelo	Mr. G. Dawson
23/ 2/48	George Fox	
15/ 2/48 16/ 2/48	2 Illustrated Lectures on Scottish Song	Mr. J. Sherer
14/ 3/48	The Life and Times of Llewellyn, the last Prince of Wales	Rev. D. Salmon
?	A musical soirée conducted by Mr. J. Thomas with a choir from Merthyr Tydfil	

Eighth Year 1848 - 1849

5/ 8/48	Glee Concert conducted by Mr. T.H. Crook	
3/10/48	Cholera	Mr. R.F. Woollett
17/10/48	The Signs of the Times	Rev. D.R. Stephens
14/11/48	Peter the Great, the Reformer of Russia	Rev. W. Allen
21/11/48	Life Assurance	Mr. J.E. Stanesby

28/11/48	The Laws of Nature as applied to the Preservation of Health	Mr. W.H. Michael
12/12/48	The Perfect Consistency of the Mosaic account of the Creation with recent Geological Discoveries	Rev. D. Dixon
2/ 1/49	Australia	Mr. J.C. Byrne
3/ 1/49	Port Natal	
16/ 1/49	2 Lectures on the most distinguished	Mrs. C.L. Balfour
17/ 1/49	Female Sovereigns of Europe	
15/ 2/49	Self Culture, Mutual Instruction and Social Enjoyment	Rev. D. Dickson
20/ 2/49	National and Popular Music	Herr Wahrhan
2/ 3/49 (?)	2 Lectures on Some of the subordinate	Mr. C.C. Clarke
9/ 3/49 (?)	characters of Shakespeare	
20/ 3/49	The Origins of Language	Rev. T. Thomas

Ninth Year 1849 - 1850

14/ 6/49	Glee Concert	Mr. Sherring (?)
?/10/49	4 Lectures on the Cotton Trade	Mr. F. Warren
20/11/49	2 Lectures on the Romance and	Mrs. C.L. Balfour
21/11/49	Reality in the History of Women	
4/12/49	What is a Gentleman?	Rev. H. Solly
18/12/49	The Natural Magic of Chemistry	Mr. J.D. Malcolm
19/12/49	The Philosophy of a Candle	
12/ 2/50	Popular proverbs, their wisdom or want of it	Mr. G. Dawson
20/ 2/50	The Advantages arising to Society from Difference of Opinion	Rev. J. Barfield
11 /3/50		Mr. Buckingham
12/ 3/50	4 Lectures on Palestine or the Holy	
14/ 3/50	Land	
15/ 3/50		

Tenth Year 1850 - 1851

1/ 7/50	Glee Concert	Mr. Foord and party
29/10/50	Wit and Humour	Mr. G. Grossmith
30/10/50	A Lecture on Lecturing	
12/11/50	2 Lectures on English Female Poets	Mrs. C.L. Balfour
13/11/50	of the Present Century	
3/12/50	2 Musical entertainments illustrating	Mr. Sherrer
4/12/50	the Songs of Scotland	
17/12/50	The Greatness of the British Nation	Rev. W. Allen
7/ 1/51	Concert	Mr. Foord and party
14/ 1/51	The Great Exhibition	Mr. Blackwell
4/ 2/51	The Self Improvement of Young Men	Rev. W. Isaacs
18/ 2/51	Women	Rev. O. Owen
5/ 3/51	The Life and Character of Alfred the Great	Mr. G. Dawson
25/ 3/51	The Study of First Principles	Rev. J. Barfield
1/ 4/51	Mahomet	Rev. J.T. Morley

Eleventh Year 1851 - 1852

20/10/51	An Hour with the Modern Humourists	Mr. G. Grossmith
20/10/51	The Writings of Charles Dickens	
3/12/51 (?)	Female Costume	Mrs. C.T. Foster
16/12/51	Don Quixote	Mr. Hysoly (?)
26/ 1/52	2 Lectures on Contrasts and Parallel in	Mrs. C. Balfour
27/ 1/52	the lives of celebrated women living in	
	the times of great revolution in England	
	America, and France	
3/ 2/52	Cromwell	Mr. G. Dawson
17/ 2/52	Mathematical Studies	Mr. C.E. Barnard
10/ 3/52	An Entertainment	
22/ 3/52	Soirée	

Twelfth Year 1852 - 1853

27/10/52	2 Lectures on Ballad Music of	Mr. G. Barker	
28/10/52	England		
8/11/52	Old Books	Mr. G. Dawson	
?	One of his essays read by	Mr. W. Christophers	79*
30/11/52	Reading from "Hamlet"	Mr. H. Nicholls	126
1/12/52	Reading from "King Lear"		106
21/12/52			166
22/12/52	4 Entertainments	Mr. Fitzgerald	250
30/12/52			310
31/12/52			279
11/ 1/53	2 Lectures on Scientific Subjects	Mr. Wheeler	
12/ 1/53			
?	2 Entertainments	Miss Glyn	51
?			75
22/ 2/53 ?	Home Influence	Mrs. C. Balfour	
23/ 2/53 ?	The Production of the Principal		
	American Writers		

Thirteenth Year 1853 - 1854

20/ 9/53	2 Lectures on The Female Character	Mrs. C. Balfour
21/ 9/53	as delineated by English Poets	
	("spacious room well filled" (1))	
31/10/53	Wellington and Napolean, a Parallel	Mr. G. Dawson
	and a Contrast	
16/11/53	A Week in Constantinople	Mr. P.B. St. John

(A mix-up; Mr. P.B. St. John missed his train, the lecture was given by his brother, Mr. H. St. John (2))

7/12/53	2 Musical Entertainments	Mr. W. Parsons
8/12/53		

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*Number of people in attendance

11/ 1/54	The Life and Writings of Theodore Hooke	Mr. E. Copping
12/ 1/54	An Hour with Thomas Ingoldsby	
18/ 1/54	The Cultivation of Literary Taste	Rev. W. Aitcheson
	("Very few present" (3))	
24/ 1/54	Bleak House	Mr. G. Grossmith
8/ 2/54	A Musical Entertainment	Sir H. Bishop
22/ 2/54	A Musical Entertainment	Mr. E. Roberts
1/ 3/54	The Steam Engine: its connection with Human Progress	Mr. J. Harrison
15/ 3/54	2 Lectures on Burlesque	Mr. C. Charles
16/ 3/54	("Audience very small" (4))	
5/ 4/54	Our Library	Rev. J. Barfield
10/ 4/54	The Chemistry of the Mineral Kingdom	
12/ 4/54	The Chemistry of Everyday Life	Mr. C.F. Partington
14/ 4/54	The Philosophy of the Earth and its Wonders	
	("Not 20 being present on each evening" (5))	

Fourteenth Year 1854 - 1855

22/ 6/54	2 Lectures by a New Zealand Chief	Mr. B. Burns
23/ 6/54		
12/ 9/54	The City of the Sultan	Mr. H. Phillips
29/ 9/54	Comic Characterisation	Mr. C. Charles
13/10/54	The Origin, Character and Doings of the Anglo-Saxons	Mr. G. Dawson
15/11/54	America	Mr. A. Burn
	("Thinly attended" (6))	
22/11/54	2 Musical Entertainments	Mr. Parson and Miss Wilton
23/11/54		
6/12/54	Christmas, Ancient and Modern	Mr. J. Simpson
19/12/54	English Music and English Musicians	Mr. T. Williams
	("A small audience" (7))	

4/ 1/55	The Prose and Poetry of Robert Burns	Mr. J. Harrison
11/ 1/55	London Lodgings and Lodgers	Mr. E. Copping
	("Very few present for an amusing talk" (8))	
6/ 2/55	A Musical Entertainment	Mr. E. Roberts
26/ 2/55	Notes - Musical, Biographical and Critical	Mr. & Mrs. G.A. Coope
	("Before a very select audience" (9))	
6/ 3/55	Music and Manners	Mr. T. Williams and Family
	("An interesting lecture. The audience .... very small" (10))	
27/ 3/55	Henry Kirk White	Rev. W. Aitchison

Fifteenth Year 1855 - 1856

10/ 9/55	The Poet's Mission	Mrs. C. Balfour
23/10/55	Some passages of Russian History	Mr. G. Dawson
	("A numerous audience" (11))	
6/11/55	The Life and Writing of Sir Thomas Campbell	Mr. J. Harrison
20/11/55	An Illustrative and Impersonal	Mr. W. Rowton
21/11/55	Entertainment (in two parts)	
4/12/55	Character	Mr. W. Christopher
21/12/55	The Combination of the Sublime and the Ridiculous	Mr. A. Burn
8/ 1/56	The Lake Poet	Rev. W. Aitchison
	("A numerous and highly respectable audience" (12))	
19/ 2/56	Soirée	
4/ 3/56	Martin Chuzzlewick	Mr. G. Grossmith
	("A large audience" (13))	
28/ 3/56	Self Culture	Sir T. Phillips
	("A pretty numerous audience" (14))	
28/ 4/56	Pagan Architecture	Mr. Dixon

Sixteenth Year 1856 - 1857

25/ 8/56 26/ 8/56	2 Humourous Entertainments	Mr. R. Fitzgerald	220* 300
?	Musical Entertainment	Mr. J. Snary and party	
11/11/56	The Ludicrous in Life	Mr. G. Grossmith profit 7s 6d	214
25/11/56	Festus; a Poem	Mr. E. Thomas loss 12s 0d	94
	("Had the lecture been half its length it would have been more acceptable" (15))		
9/12/56 10/12/56	The Life, Times and Works of John Bunyan Thomas Hood	Mr. J.K. Applebee	
	156 at 1st 251 at 2nd	profit £3-14s	
23/12/56	Dicken's "Christmas Carol" read by	Mr. G. Melville loss 13s 6d	125
6/ 1/57	The Prose Writings of Milton	Rev. F. Pollard loss 11s 6d	87
?	Minstrelsy	Mr. E. Roberts and Mrs. Winn profit £5-5s	320
25/ 2/57	Hamlet	Mr. G. Dawson profit 5s 6d	213
10/ 3/57 11/ 3/57	Nicholas Nickleby Humourous Characters	Mr. G. Grossmith	180 loss 196 19s6
24/ 3/57	Douglas Jerrold	Mr. Applebee	173 loss
25/ 3/57	The Educational Movement of the Age		189 5s0d
- 4/57	Soirée		

*Number of people in attendance

Seventeenth Year 1857 - 1858

8/ 7/57	Soirée at Usk Castle		
29/ 9/57 (?)	A Musical Entertainment	Miss J. St. George	242
		loss £4-4s-6d	
20/10/57	British Rule in India	Sir T. Phillips	175
		loss 2s6d	
27/10/57	An Evening with Shakespeare	Mr. T. Topham	94
		loss £3-17s-6d	
10/11/57	Social Progress	Mr. Dickins	105
		loss £1-7s-6d	
24/11/57	Single Life	Rev. F. Rowland Young	
		152, profit 1s-0d	
22/12/57	The Poetry of Life	Mr. Applebee 85	loss
23/12/57	Oliver Goldsmith	111	£3-4s-0
	("Attendances not as good as might have been expected from the popularity of the lecturer" (16))		
-/12/57	The Road, the River and the Rail	Mr. J. Carpenter 272	loss
-/12/57	2 Entertainments	109	£3-6
4/ 1/58	Our Comic Authors and Satirists	Mr. W. Rowton 63	loss
5/ 1/58	Illustrations of Ancient Mistrelsy and Modern Humour	66	£4-19s
18/ 1/58	Tennyson and his Poetry	Rev. W. Aitchison	161
		loss 7s 6d	
2/ 2/58	Notes of a Wandering Minstrel	Mr. E. Roberts	283
		profit £3-15s-6d	
16/ 2/58	The Four Literary Eras	Mr. H. Owgen	70
		loss £2-19s-0d	
5/ 3/58	"A Nicht wi' Burns"	Mr. Angus Fairburn	185
		loss 10s-6d	

15/ 3/58 16/ 3/58	2 Lectures on Chemistry (?)	Professor Partington loss £4-14s-0d	22 19
30/ 3/58	A monopolylogue Entertainment "The Omnibus"	Miss Clara Seyton profit £3-17s-6d	256
-/ 4/58	Soirée	235, loss 17s-0d	

Eighteenth Year 1858 - 1859

26/10/58	Our Indian Empire	Sir T. Phillips loss 14s-6d	102
9/11/58	"There and Back"	Mr & Mrs G.A. Cooper loss £2-18s-0d	127
23/11/58	Popular Delusions	Dr. H. Owgen loss £3-6s-6d	43
7/12/58	Home and Foreign Lyrics	Miss J. St. George profit £8-1s-6d	375
21/12/58	Luther	Rev. Dr. James profit £2-8s-6d	139
11/ 1/59	Merry Thoughts by Merry Men	Mr. W. Rowton profit 14s-0d	210
24/ 1/59	Charlotte Brontë	Mrs. C. Balfour profit 3s-0d	207
	("This popular and talented lecturer succeeded in enchaining the attention of her audience for above 2 hours" (17))		
?	Phenomena of Dreaming	Rev. A. McAuslane loss 2s-9d	245
22/ 2/59	John Bunyan	Mr. J.K. Applebee profit 2s-0d	170
8/ 3/59	Punch	profit 2s-0d	184
17/ 3/59	Thomas Carlyle	Rev. W. Aitchison loss 15s-6d	69
5/ 4/59	Soirée	320, loss 18s-6d	

Nineteenth Year 1859 - 1860

25/10/59	Social Science	Sir T. Phillips	70
		loss 15s-0d	
8/11/59	"A Peep at Life"	Mr. Basil Young	270
	an Entertainment	profit 6s-0d	
23/11/59	The Life, Times, Genius and	Mrs. C. Balfour	237
	Writings of William Cowper and	profit £2-0s	
	Rev. George Crabbe		
-/12/59	Mental Improvement	Rev. J.T. Wrenford	48
		loss 10s-0d	
12/12/59	A Humourous Lecture on	Mr. G. Grossmith	213
	Lecturing	loss £2-4s	
3/ 1/60	The True Reformer	Rev. A. McAuslane	99
		loss 5s-6d	
-/ 1/60	"The Rose, Shamrock and Thistle"	Mr. and Mrs. Cotton	
	an Entertainment		
17/ 1/60	An Evening with Thomas Hood	Mr. W. Rowton	129
		loss 17s-6d	
24/ 1/60	Concert conducted by	Mr. H.J. Groves	270
		profit £1-10s	
21/ 2/60	Curious Geological Facts	Mr. J.E. Lee	120
		loss 16s-0d	
6/ 3/60	The Lays of Great Britain	Mr. E. Roberts	220
		profit £4-15s	
27/ 3/60	John Wesley: "The Man and his	Mr. J.K. Applebee	
	Work"		
1/ 5/60	Soirée		

Twentieth Year 1860 - 1861

?	Soirée	Mr. H. Groves and party
21/ 9/60	Concert	Mr. G.C. Partridge and party

9/10/60	The Two Prima Donnas	M. and Madame Enderssohn	
		153, loss £2-3s	
31/10/60	The Volunteer Corps Movement	Rev. A. McAuslane	190
21/11/60	Good Queen Bess	Mr. G. Dawson	210
		profit 15s-0d	
-/12/60	Concert	Mr. H. Phillips	120
		loss £4-1s	
18/12/60	Charles Lambe	Mr. J.K. Applebee	87
		loss £1-2s	
8/ 1/61	Life in Paris	M. H.J.V. de Candole	69
		loss £1-18s-6d	
21/ 1/61	Adam Bede	Mr. G. Grossmith	97
		loss £1-19s-6d	
12/ 2/61	Garibaldi	Rev. J. James	33
		loss £1-13s-6d	
26/ 2/61	Harp Entertainment	Mr & Roberts & Miss Topham	
		142, loss £2-5s	
26/ 3/61	Thomas Ingoldby	Mr. W. Rowton	109
		loss £1-13s	

Twenty First Year 1861 - 1862

8/ 8/61	Sea trip to Ilfracombe	profit £7-9s
1/10/61 (?)	Grand Fête Champêtre and Gala	profit £70-12s
3/12/61	"Shadows on the Wall"	Mr. Basil Young
4/12/61	"The Man in the Moon"	
	(a loss of 14s-0d was met by the secretary personally (18))	
10/ 2/61	People's Proverbs	Rev. H. Stowell Brown
		210, profit 10s-0d
18/ 2/61	English Notions of American Character	Mr. G. Grossmith 288
		profit £1-6s-6d
	("Succeeded well in amusing if not instructing his hearers" (19))	

7/ 3/62	Matrimony	Rev. A. McAuslane	152
		profit £2-16s	
25/ 3/62	The Three Graces of Womanhood	Mr. J.K. Applebee	150
	Maidenhood - Wifehood - Motherhood	profit 5s-6d	

Twenty Second Year 1862 - 1863

20/ 5/62	Concert	Mr. H.J. Grove	
21/10/62	Pickings from Pickwick	Mr. G. Grossmith	166
		profit 6s-0d	
3/11/62 4/11/62	2 Concerts Cremona Musical Union	97 64	profit 6s-6d
9/12/62	A Peep at Real Life	Mr. B. Young	489
		profit £6-5s	
	("We have rarely, if ever, seen the Town Hall Assembly Room so crowded on the occasion of a lecture" (20))		
16/12/62	From Grave to Gay	Mr. J.K. Applebee	118
		loss £1-5s	
5/ 1/63	The American War, its causes and consequences	Mr. H. Vincent	262
		profit £1-10s-6d	
-/ 1/63	An entertainment by the Elocution class to raise money for the Lancashire Relief Fund		
27/ 1/63	"Punch"	Rev. H. Stowell Brown	241
		profit £1-0s	
10/ 2/63	The Moslems in Spain	Rev. Dr. James	158
		profit £1-2s	
24/ 2/63	Ill-used men	Mr. G. Dawson	141
		loss £2-0s	
11/ 3/63	Latest Intelligence	Miss Grace Egerton	290
12/ 3/63	Christmas Parts	profit £1-6s-6d	268
-/ 3/63	An entertainment by the Elocution class to raise money for books for the Library, £6-10s-9d was raised		

24/ 3/63	Henry VIII and his Queens	Mrs. C. Balfour	290
		profit £2-10s	
21/ 4/63	Soirée	340, profit £1-7s-3d	

Twenty Third Year 1863 - 1864

9/ 7/63	Picnic at Raglan Castle	376, profit £2-18s-6d	
20/10/63 (?)	Soirée	320, profit £1-12s	
27/10/63	Remarkable Women	Mrs. C. Balfour	190
		profit 2s-0d	
10/11/63	Prince Albert, his worth and his work	Mr. J. K. Applebee	132
		loss £1-1s-6d	
24/11/63	Life's Illusions and Realities	Mr. H. Vincent	303
		profit £2-5s-6d	
8/12/63	Musical Entertainment	Mr. B. Young	430
		profit £4-9s	
22/12/63	John Bunyan and his Allegories	Rev. Dr. James	107
		profit 10s-0d	
5/ 1/64	Dr. Samuel Johnson	Mr. G. Dawson	110
		loss £2-0s-0d	
19/ 1/64	"Too good to be true"		
	("Moderate attendance" (21))		
2/ 2/64	John Howard	Rev. S. Fox	
	("Attendance somewhat limited" (22)		
16/ 2/64	Musical Entertainment,	Mr. F. Penna	164
	"Without a Title"	loss £3-5s-0d	
2/ 3/64	Men and Women I have studied	Rev. A. McAuslane	150
9/ 3/64	2 readings by Rev. J.C.M. Bellew	195 profit £3-4s-6d	
11/ 3/64	("The most finished elocutionist of his day" (23))		246
15/ 3/64	Musical Entertainment	Mr and Mrs. C. Rickman	
		130, loss £5-11s-6d	
29/ 3/64	Epitaphs	Rev. P.W. Darnton	101

Twenty Fourth Year 1864 - 1865

27/ 6/64	Excursion to Cheltenham	485, profit £13-7s-6d	
28/ 8/64	Excursion to Raglan	250, profit £3-4s-0d	
20/10/64 (?)	Soirée	277	
1/11/64	Wise Saws and Modern Instances	Rev. J.W. Lance	135
15/11/64	Reading from "The Merchant of Venice"	Miss Glyn loss £4-2s-0d	230
29/11/64	Entertainment by the Elocution Class	303, profit £4-0s-5d	
12/12/64	2 Readings from the Poets and	Rev. J.C.M. Bellew	198
13/12/64	Humourists	profit £5-12s-0d	288
17/ 1/65	Dr. Arnold of Rugby	Mr. G. Dawson loss £1-11s-6d	131
31/ 1/65	Comic Chapters from Barnaby Rudge	Mr. W. Rowton loss £3-4s-6d	87
14/ 2/65	English Oddities and Weaknesses	Mr. H. Vincent profit £2-0s-6d	260
?	Recitals from the Poets and Dramatists	Mrs. J.P. Chadwick	
28/ 2/65	On Books	Rev. J. Wadsworth	
14/ 3/65	Our Assizes	Mr. B. Young profit £7-2s-9d	409
28/ 3/65	Entertainment by Elocution Class	388, profit £8-7s-6d	
19/ 5/65	Soirée	139, loss £3-0s-4d	

Twenty Fifth Year 1865 - 1866

20/10/65	An Evening with some Recent Wits and Satirists	Mr. W. Rowton loss £3-9s-0d	82
7/11/65	The Funny Side of Human Nature, or the Shadows on the Wall	Mr. B. Young profit £4-17s-6d	344
18/11/65	Readings from the Poets	Rev. J.W. Lance profit £3-18s-6d	139

28/11/65	Elementary Science	Mr. Buckmaster loss 10s-6d	85
12/12/65	Lord Palmerston, his Life and Character	Mr. G. Davison	138
9/ 1/66	"All Round the World"	Miss Emma Stanley profit £3-18s-6d	235
	("We can only class Miss Stanley as a second-rate performer" (24))		
23/ 1/66	American Orators and Oratory	Mr. Moses Coit Tyler loss £3-7s-0d	40
12/ 2/66	The Proverbs of George Herbert	Rev. J.W. Lance profit £1-10s-3d	169
?	Grand Evening Concert	Mr. E. Roberts and party	
27/ 2/66	The Influence of Women	Mrs. Bessie Ingliss loss £4-3s-6d	46
13/ 3/66	Optics and Optical Illusions	Mr. E. Wheeler loss £4-0s-0d	89
27/ 3/66 (?)	Oliver Goldsmith	Rev. P.W. Darnton	

Twenty Sixth Year 1866 - 1867

30/10/66	American Wit and Humour	Mr. M.C. Tyler	107
6/11/66	My Peep Show	Mr. B. Young	366
20/11/66	Verbal Sketches of Modern Society	Rev. Hickman Smith	82
4/12/66	Benevolent Associations of the Day	Mr. E. Burritt	120
18/12/66	Robert Stephenson	Rev. H. Stowell Brown	33
8/ 1/67	Sir John Falstaff	Rev. J.W. Lance	66
?	A dramatic performance by amateurs from Crumlin		130
19/ 2/67	Reading; How and What?	Rev. J. Wadsworth	25
?	Dramatic Narrative Poetry	Mr. W. Rousby	22
22/ 3/67 23/ 3/67	Odd Folks, 2 Lectures	Mr. Thurton	500

Twenty Seventh Year 1867 - 1868

21/10/67	Soirée and Art Exhibition	
7/11/67	Musical Entertainment, "Jest and Earnest"	Mr. Buckland
17/12/67	Schools and Schoolmasters of Olden Times	Rev. H. Oliver
	("Less than 30 present" (25))	
14/ 1/68	Shams	Mr. J. de Fraine
	("The very few present enjoyed a rich treat" (26))	
5/ 2/68	?	Mr. B. Young
	(planned, but did it take place?)	

Twenty Eighth Year 1868 - 1869

2/ 2/69	An Entertainment	Mr. B. Young 354
		loss £2-13s-6d

Twenty Ninth Year 1869 - 1870

8/11/69	Eisteddfod	

Appendix 2

Books bought for the Library of the Mechanics' Institute

Date	Amount Proposed	Amount Spent	Number of Volumes
4/ 8/46	£ 5	£ 6- 1s- 0d	36
1/ 2/47	£30	£29-13s- 0d	172
1/ 6/47	£ 8	£ 8-19s- 6d	43
1/ 1/48	£15	£15-15s- 0d	76
5/ 9/48	£12	£10-17s- 0d	51 + a map of Europe
7/11/48	£ 5 from the Bishop of Llandaff	£ 6- 4s- 6d	9
5/12/48	£10	£11- 5s- 6d	70
6/ 2/49	£10	£11-11s- 0d	51
2/10/49	£15	£17-19s- 6d	100
2/12/49	£10	£13- 4s- 6d	60
5/ 2/50	£20	£24-16s- 3d	87
4/ 6/50	£20	£27-10s- 1d	94
11/12/50	£15	£17-15s- 6d	50
6/ 5/51	£20	*	
4/ 5/52	£10	£10- 9s- 0d	46
5/ 7/53	£10	£12-10s- 0d	34
1/ 8/54	£20 (£10 from Mr. Rennie)	*	
1/ 7/56	£10	£10-10s- 6d	63
5/ 1/57	£10	£10-16s- 3d	77
6/ 9/57	£15	£14-19s- 0d	86
1/12/57	£10 (£5 from Sir C. Morgan)	£10- 2s- 0d	44
4/ 5/58	£10	£12- 3s- 9d	57
10/ 5/59	£20	£14- 6s- 6d (1)	90
15/ 5/60	£10	£11-15s- 0d	47
7/ 5/61	£10	£13-11s- 6d	85
6/ 5/62	£10	£11- 7s- 6d	55

31/ 3/63	£ 6-10s- 0d from an entertainment - included in next item		
12/ 5/63	£20	£21-15s- 0d	150
12/ 8/64	£15	£19- 6s- 0d	118
17/11/64	£ 7 (£3-10s from bequest)	£11- 7s- 6d	29
2/ 5/66	£10	£11- 4s- 4d	56
7/ 5/67	£10 (for replacing old books)	*	
19/10/67	£50 (2)		

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* There is no evidence that these amounts were spent - but this was probably an oversight on the part of the Secretary when writing up minutes

(1) £20 was not spent because members failed to put forward enough suggestions for books

(2) Monmouthshire Merlin 19/10/67

All the information in the appendix (except (2)) comes from Committee Minutes of the Newport Athenaeum and Mechanics' Institute.

Appendix 3

Rules of the Reading Room and Library of the Newport Athenaeum and Mechanics' Institute, as agreed at a meeting on 5th June, 1849

Reading Room

1) The Reading Room shall be open from 9 in the morning until 10 in the evening Sundays excepted
2) Perfect silence shall be observed in the Reading Room
3) No book, periodical or paper shall be taken out of the Reading Room
4) Periodicals after laying on the table for 1 month shall be taken into the library for circulation among members
5) No member shall be allowed to retain any Newspaper more than 10 minutes - or Periodical, Book, or Magazine more than 30 minutes after a member has applied for it
6) Members are requested to show their tickets to the doorkeeper at the commencement of every quarter if requested

Library

1) The Librarian will attend every Monday and Thursday night from ¼ past 8 to ¼ past 9 for the renewal and exchange of Books
2) No member shall be allowed to renew a book if any other member requires it or have more than one book out at a time
3) Any member losing a book shall pay the value of it or forfeit his or her right to the privileges of the Institution
4) Books of reference (as ordered by the Committee) shall not be taken out of the Reading Room or Library but are for the use of Members on the premises. Should a member wish to consult any book contained in the library he may obtain the same by applying to the curator
5) Members are required to show their tickets to the Librarians at the commencement of every quarter if requested

NEWPORT ATHENÆUM

ESSAY AND DISCUSSION CLASS.

"TRUTH NOT VICTORY."

OBJECTS.

This Class is constituted for the purpose of affording facilities for Moral and Intellectual Improvement to the Members of the Newport Athenæum—by means of original Essays and oral Discussions on all topics of general interest, excluding controversial Theology and local Politics.

RULES.

1.—Any Person desirous of becoming a Member shall be proposed and seconded at one meeting and ballotted for at the next. On nomination, *One Shilling and Sixpence* (being the subscription for one session) shall be deposited with the Secretary, to be returned if the proposed Member be not elected. No Person so rejected shall be eligible for re-nomination within three months from the date of such rejection.

2.—The Subscriptions shall be *One Shilling and Sixpence* a year, and shall in all cases be paid in advance.

3.—The General Committee shall appoint a President of this Class, either from their own body, or from the Members of the Institute; and at an Annual Meeting to be held in April for the reception of a Report, the Members of the Class shall elect by ballot, two Vice-Presidents, and a Secretary (who shall also be Treasurer) those several Officers to undertake the general management of the class.

4.—At ordinary Meetings, the Chair shall be taken at Eight o'Clock, and the business or exercises of the evening commence as soon as Four Members, including the Chairman be present. The Secretary shall take minutes of the proceedings of each meeting of the class, and furnish to the General Committee a report of the same, if required.

5.—The opener of a discussion shall be at liberty to introduce his subject either orally or in writing, and to reply to the arguments advanced against him; but no other person shall address the meeting on the same evening more than once, except in explanation, or unless an interval of one minute shall have elapsed without any other member rising; nor shall any one except the opener and the opponent be allowed more than a quarter of an hour for his address—the latter only twenty minutes, and the former thirty, who shall at a quarter to Ten o'clock (unless otherwise arranged or the subject be adjourned) be called upon to reply, which shall not exceed ten minutes.

6.—The Chairman at each meeting to be the interpreter of the rules; to have unlimited authority upon every question of order, the right of voting, and the casting vote.

7.—There shall be one Session in the Year, commencing on the 1st of October, and ending on the 1st of April; and there shall be Cards printed, containing subjects for debate for the following Three Months, and should not sufficient subjects be guarranteed, when two only remain on the existing card, the Officers shall have the power of requiring any of the Members that shall not have introduced a subject, either himself or by proxy for upwards of three months, to name within a week an approved essay, or subject they will undertake to introduce, or declining to do so, shall be fined Sixpence; and any Member not introducing a subject, either himself or by proxy after engaging to do so, or being absent at quarter past Eight o'clock, on the evening appointed for its introduction, shall be fined Sixpence, and an opponent for the like neglect Threepence, and no person so fined shall take any part in the proceedings, until such fine be paid.

8.—Three days notice of all Meetings shall be posted in the Reading-room, and one of the Cards containing the subjects for debate shall be left in the Reading-room for inspection of the Members of the Institution.

9.—A Member not paying his Subscriptions, or any Fine he may have incurred, within three months after having received notice from the Secretary of its becoming due, shall be struck off the roll.

10.—No alteration shall be made in these Rules unless at a Meeting convened by four Members; notice of which shall be posted a week previously in the Reading-room; and then only, if agreed to by a majority of those present, and afterwards confirmed by the general Committee.

N.B. Visitors, Members of the Athenæum, are admitted to the debates, but cannot take part in the proceedings.

Appendix 5

Newport Working Men's Institute Programme 1851-1854

30/ 4/51	Discussion	"Has the introduction of Machinery benefited or injured the working class?"
13/ 5/51	Discussion	Continuation of the above
26/ 5/51	Tea Party and Concert to raise funds	
27/ 5/51	Discussion	"Whether Barclay and Parkin's draymen were justified in their recent conduct towards Baron Haynan, the Austrian woman-flogger."
8/ 7/51	Public meeting to review the first quarter's proceeding.	
5/ 8/51	Discussion	"Whether this Institution shall be kept open on Sundays.'
12/ 8/51	Discussion	Continuation of the above
9/ 9/51	Discussion	"Has the government a right to educate the people?"
12/11/51	Lecture	"The Progress of the British Nation during the last half Century" Rev. W. Allen
8/12/51	Lecture	"The Poetry of Cowper" Rev. Dr. Stowell
9/12/51	Discussion	"Is moderate drinking beneficial or injurious?"
19/ 1/52	Lecture	"The Intellectual, Political, and Moral Influences of the Press" Mr. J. Jenkins
10/ 5/52	Tea Party and Concert	
7/12/52 8/12/52 14/12/52 15/12/52	4 Lectures	"Recent Findings at Nineveh"
18/ 1/53	Lecture	"Confucius and the Chinese"
8/ 2/53	Lecture	"The Progressive Tendencies of the Age" Rev. B. Parsons
9/ 2/53	Lecture	"Teetotalism" Rev. B. Parsons
?	Lecture	"The Physical Aspects and Resources of America and Political condition of the People Rev. C.J. Evans (New York)

?	Lecture	"The Social, Intellectual, Moral, and Religious Character of the People" Rev. C.J. Evans
9/ 5/53	Tea Party and Concert	
13/ 9/53	Lecture	"John Howard" Rev. Hill
12/12/53	Concert to raise funds	
26/12/53	Tea party and musical entertainment to raise funds	
31/ 1/54	Lecture	"Labour and Capital, their Rights and Duties" The Editor of the Star of Gwent
20/ 2/54	Lecture	"Self Elevation" Rev. Carveth
7/ 3/54	Lecture	"Volcanoes and Earthquakes" Rev. J. Barfield

The above information was obtained from copies of the Monmouthshire Merlin and the Star of Gwent, April, 1851 to May, 1853

Appendix 6

Newport Athenaeum Penny Readings 1864-1867

Date	Attendance	Receipts
11/10/64	659	£5-14s-2
25/10/64	578	£3-14s-7½
8/11/64	471	£3- 4s-9½
22/11/64	560	£3-16s-7
6/12/64	622	£3-16s-0
20/12/64	539	£3- 9s-5
10/ 1/65	587	£3- 6s-9
24/ 1/65	528	£3-15s-3
7/ 2/65	740	£5-18s-1
21/ 2/65	820	£7- 5s-9
7/ 3/65	801	£7- 6s-2
21/ 3/65	755	£5-10s-2
10/10/65	583	
24/10/65		
14/11/65		
5/12/65		
19/12/65	"Only about 400 present"	
16/ 1/66	"The best .... in point of attendance"	
30/ 1/66	"Larger number present than before"	
6/ 2/66		
20/ 2/66	"Very good attendance"	
3/ 4/66	"Largest number present of the season"	
23/10/66	"Numerous attendance	
13/11/66		
27/11/66	"About 700 present	

11/12/66	
1/ 1/67 (?)	
15/ 1/67	"Not so many present"
5/ 2/67	"Hall well filled"
12/ 2/67	"Large attendance"
5/ 3/67	"Approximately 300 present"
12/ 3/67	"A goodly audience but not so large as usual"
2/ 4/67	"Large audience"
14/11/67	"A small audience"
3/12/67	"Full and respectable audience"

Comments on attendance are taken from various copies of the Monmouthshire Merlin, and the Star of Gwent, October, 1864 to December 1867.

Numbers and receipts are taken from the Committee Minutes of Newport Athenaeum and Mechanics' Institute.

Appendix 7

Prospectus for Classes of Newport Athenaeum and Mechanics' Institute, 1867

Science and Art Classes

in connection with the Science and Art Department of

the Committee of Council on Education

I MECHANICAL AND MACHINE DRAWING:-

Geometrical Principles employed in Projection - Scales of Drawings - application of these to drawing Plans, Elevations, and Sections of Machinery.

Each Student will provide himself with a Drawing-board, Paper, Copy-book, Lead-pencil, T Square, Set Squares, Compasses and Scale.

The class will be held on Tuesday and Thursday Evenings from 8-15 to 9-45. Fee 6/- per quarter, paid in advance.

II MATHEMATICS:-

Mensuration - Euclid - Algebra - Plane Trigonometry - Use of Logarithms.

Each Student will provide himself with an Euclid and Algebra.

The class will be held on Mondays and Wednesdays, from 6-30 to 8-00 p.m. Fee 6/- per quarter, paid in advance.

III NAVIGATION:-

Elementary Principles - Log-line - Compass with its corrections - Sextant - Correction of Courses.

Plane, Transverse, Middle-Latitude, Mercator's and Great Circle Sailing

Method of Calculating Sea-Journal

Each Student will provide himself with a "Riddle's Tables" and a Copy-book.

The class will be held on Wednesday from 8 to 10 p.m. and on Fridays from 6-30 to 8 p.m. Fee, 6/- per quarter, paid in advance.

IV ART CLASS

Freehand, Geometry, Perspective, Model, Crayon, and Painting.

Each student will provide himself with Drawing-board, Paper, Pencils, etc.

The class will be held on Tuesday and Thursdays, from 6-30 to 8 p.m. Fee, 6/- per quarter, paid in advance.

Master: Mr. J. Bush

(Seven Teacher's Certificates, and Six Medals)

Appendix 8

Officers of the Newport Athenaeum and Mechanics' Institute

Year	President	Vice Presidents	Honorary Secretaries
1841/42	L.Edwards		J.Slater, W.D.Evans
1842/43	W.Monkhouse		J.Salter, W.D.Evans
1843/44	W.Monkhouse (?)		J.Slater(?), - Griffi
1844/45	W.Monkhouse	T.Jones, J.Davies	R.Wilkinson, T.Inglis
1845/46	W.Monkhouse	Rev.T.L.Bright, Rev.D.R.Stephens	W.D.Evans, T.Morris
1846/47	J.S.Crosbie	J.Davies, R.S.Turner	J.Slater (resigned Aug 1846) W.Christopher (from Aug.), T.Jones
1847/48	T.M.Llewellyn	T.Hawkins, T.Phillips	E.V.Jenkins, M.Wood
1848/49	E.Dowling	F.Fox, W.Christopher	T.Jones, J.Jayne
1849/50	W.Evans	E.V.Jenkins, W.Chessell	H.Mullock, R.G.Cullum
1850/51	T.B.Batchelor	T.Jones, N.Evans R.J.Cathcart	J.F.Mullock, W.Jack
1851/52	W.C.Webb	R.J.Cathcart, T.B.Batchelor J.F.Mullock, W.Christopher	J.B.Seward, A.J.Murphy
1852/53	H.J.Davies	J.Brown, J.N.Knapp, T.Llewellin, J.Murphy	W.Jack, C.Lewis, A.G.Cullum (until 9/52 A.Barfoot (after 9/52)
1853/54	J.Brown	H.J.Davies, C.Lyne Rev.E.Hawkins, C.Lewis	J.C.Watts, J.H.Phillip H.Williams
1854/55	J.Rennie	Rev.J.Barfield, W.M.Jack, W.D.Evans, J.Harrison	A.Webber, A.A.Williams, Josiah Davies
1855/56	J.Rennie	Rev.E.Hawkins, J.Harrison, W.Christopher, H.Phillips	T.G.Harris, W.A.Dixon, H.T.James
1856/57	J.N.Knapp	Rev.E.Hawkins, Rev.W.Aitcheson, W.Christopher, R.G.Cullum	J.Wood, N.Johns

1857/58	Sir T. Phillips	Rev.E.Hawkins, T.Jones W.Christopher, R.G.Cullum	J.Wood C.Rowe
1858/59	Sir T. Phillips	Rev.E.Hawkins W.M.Jack Rev.J.T.Wrenford W.Christopher	J. Wood
1859/60	Sir T. Phillips	Rev.E.Hawkins, W.M.Jack H.Sheppard, W.Christopher	J. Wood
1860/61	Sir T.Phillips	Rev.E.Hawkins, W.M.Jack J.F.Mullock, R.G.Cullum	J. Wood
1861/62	Sir T. Phillips	Rev.E.Hawkins, W.M.Jack Rev.A.McAuslane, R.G.Cullum	J. Wood
1862/63	Sir T. Phillips	Rev.E.Hawkins, H.Farr, J.S.Stone, R.G.Cullum	J. Wood
1863/64	G.W.Jones	Rev.E.Hawkins. Sir T. Phillips, J.Wood. C.Kirby	W. Wade
1864/65	W.W.Morgan	Rev.S.Fox, Sir T.Phillips Rev.J.W.Lance, J.Wood	W.Wade, L.L.Morris
1865/66	E.J.Phillips	Rev.S.Fox, Sir T.Phillips Rev.J.W.Lance, J.Wood	W.Wade H.L.Daw
1866/67	T.F.Lewis	Rev.S.Fox, Sir T.Phillips Rev.J.W.Lance, J.Wood	C.J.Thomas E.J. Smith
1867/68	W.Graham	Rev.S.Fox, Sir T.Phillips Rev.J.W.Lance, J.Wood	A.Barfoot, E.M.Mingay
1868/69	T.Llewellin	Rev.S.Fox J.S.Stone Rev.J.W.Lance, J.Wood	E.M.Mingay, M.Rowed
1869/70	J.Murphy	Rev.S.Fox, T.Llewellin Rev.J.W.Lance J.Wood	A.Stonehouse W.N.Johns

Appendix 9

Winners of Medals, School of Art and Science, and Technical Institute 1873 - 1914

	Bronze	Silver
1873	Telfer Smith	J.G. Smith
	Miss C. Bothamley	
1874	Miss A. Bothamley	J. Ryan
		W.A. Williams
1875	Alfred I. Smith	Hugh Railton *
	Mrs. E. Lewis	
1876	George H. Brewer	George H. Whitrow
	Miss Lucy Bucknell	
1877	Miss Sarah Williams	Edward J. Bennett
1878	William Hunter	Stephen Oetter
	Miss Lilian Hawkes	Miss Sarah Williams
1879		Francis W. Goldsmith
		William Hunter
		Miss Lilian Hawkes
1880	Horace H.H. Hardnutt	Frederick Long
	Miss Edith M. Bailey	Miss Katie M. Wells
	Miss Lizzie G. Bryan	
1881	Benjamin Baker	Edgar J. Watkins
	Miss Alice B. Cox +	
1882	John Linton	Alfred Budd
	Miss Florence Wrenford	Miss Alexandra B. Cox +
1883	William Watling	Herbert W. Burt
	Miss Clara M. Lewis	Miss Ada M. Jones

*Ryan and Williams both obtained better results, but were ineligible because of the previous year's result

+The same girl?

	Bronze	Silver	Gold
1884	Miss Agnes Parfitt	William Watling	
		W. Bolt	
		Miss Edith James	
1885	Alexander G. Seath	Arthur Watkins	
	Miss Gertrude Evans	Miss Edith Parfitt	
1886	Miss Annie Gratte	John Samson	
		Henry Hall	
1887	Thomas Toft	Alfred Phillips	
	Miss Mary Bray	Miss Alice Hellyer	
1888	Miss Katie Evans	Charles Long	
	Arthur Brooks		
	Gilbert Price		
1889	G.A. Derrick	Arthur Brooks	
	Miss Nellie Rogers	Miss Alice Parnall	
1890	Henry Rees	Walter Marsh	
	Margaret Jayne	Miss Annie P. Gratte	
1891	Thomas Davies	Henry Rees	
	Ethel Campbell	Margaret Jayne	
1892	*	*	
1893	*	*	
1894	*	*	
1895	W.E. Matthews	Arthur E. Sheppard	
	Emily Thatcher	Sarah J. Hodges	
1896	*	*	
1897	Theophilus Fredrick	Arthur S. Frost	Henry Rees (Art)
	Edith Probert	Helen Evans	John Brooks (Scienc
1898	Art Janet T. Simpson	Ernest Richards	Wm. J. Bush
	Science None	A. Mortimore	Thomas A. Parkes

*Not traced

1899	Art	Wm. W. Massey	Norman A. Keene	Richard L. Walters
	Science	Ella Jones	Wm. R. Williams	Alfred Mortimore
1900	Art	H.J. Hilier	Wm. W. Massey	Edith G. Phillips
	Science	Geo. H. Crook	Annie A. Barber	Robert J. Nunn
1901	Art	Frank S. Swash	H.J. Hilier	Wm. W. Massey
	Science	Walter C. Knight	Henry H. Paine	Annie A. Barber
1902	Art	Edgar J. Mayberry	Hannah L. Stephens	Fredrick Richards
	Science	W.J. Jones	Walter C. Knight	Percy T. Davies
1903	Art	Lilian A. Miles	Horace I. Barrett	Norman A. Keene
	Science	Arthur Rowland	Wm. James Jones	Arthur H. Langford
1904	Art	Mary S. Brewer Elsie M. Simmons	Annie W. Brooke	Dudley G. Lewis
	Science	David H. Jones	Arthur Rowland	Percy J. Leonard
1905	Art	Frank Garland	Mary S. Brewer Elsie M. Simmonds	Amy Ellis
	Science	William Payne	David H. Jones	Wm. James Jones Arthur Rowland
1906	Art	Arthur J.L. Whitehead	Madoline A. Brewer	Elsie H. Simmonds
	Science	Vivian Rees	Arthur L. Jones	David H. Jones
1907	Art	Althea Summers	Lilian A. Miles	Madoline A. Brewer
	Science	Benjamin Lambert	Vivian Rees	Arthur L. Jones
1908	Art	*	*	*
	Science	*	*	*
1909	Art	Margaret M. Smith	None	Ethel Stringa
	Science	*	*	*
1910	Art	Wm. H. Golightly Charles H. Hughes Mary K. Winter	Harold J. Gardener	Wm. G.E. Jones
	Science	Cecil L. Simpson	Edward C. Skrimshire	H. Rowland

*Not traced

1911	Art	*	Ivor G. Johns	Mary K. Winter
	Science	Thomas T. Hirst	Cecil L. Simpson	Wm. A. Linton Theodore Rowland
1912	Art	Evelyn D. Rendell	Margaret M. Smith	Ethel Stringa +
	Science	Basil Millwater	Arthur W. Jakeway	Benjamin T. Price
1913	Art	Alice Oates	Constance M. Griffiths	Ethel Greenland
	Science	Wm. C. Venmore	Cecil R.L. Hall	Gilbert W. Emery
1914	Art	Elsie L. Razey	Jessie G.E. Dunstan	Constance M. Griffith
	Science	None	Wm. C. Venmore	Arthur W. Jakeway

*Not traced

+Awarded the silver medal because she won a gold medal in 1909

Appendix 10

Government Grants to the School of Science and Art

1873 - 1890

Year	Art	Science	Total
1873	£20- 5- 0	£30- 0- 0	£50- 5- 0
1874	£20- 4- 0	£28- 0- 0	£48- 4- 0
1875	£24-19- 0	£41- 0- 0	£80-19- 0 x
1876	£29-10- 0	£41- 0- 0	£92-10- 0 x
1877	£57- 0- 0 x	£21- 0- 0	£78- 0- 0
1878	£34- 8- 6 x	£28- 0- 0	£62- 8- 6
1879	£45- 0- 0 x	£24- 0- 0	£69- 0- 0
1880	£69- 6- 0 x	£23- 0- 0	£92- 6- 0
1881	£57-14- 0 x	£28- 0- 0	£85-14- 0
1882	£80- 2- 6 x	£16- 0- 0	£96- 2- 6
1883	£101- 1- 0 x	£18- 0- 0	£119- 1- 0
1884	£82-12- 0	£35- 0- 0	£132-12- 0 x
1885	*	*	£150- 6- 0
1886	£75- 6- 0	£43- 0- 0	£148- 6- 0 x
1887	*	*	£230- 3- 9
1888	*	*	£240-14- 0
1889	*	*	£222- 8- 0
1890	*	*	£180-10- 0

*individual figures not available

xincludes grants for pupil teacher(s) and secretarial work

All figures are taken from committee minutes

Appendix 11

Coal Shipments from Newport 1797 - 1898

Year	Thousand Tons	Year	Thousand Tons	Year	Thousand Tons
1797	7	1850	551	1877	1,409
1798	10	1851	603	1878	*
1799	18	1852	589	1879	1,976
1800	32	1853	562	1880	2,072
1801	30	1854	641	1881	2,242
1802	32	1855	731	1882	2,485
1803	36	1856	*	1883	2,820
1804	64	1857	705	1884	3,033
1805	74	1858	678	1885	3,187
1806	89	1859	682	1886	3,389
1807	110	1860	817	1887	3,785
1808	132	1861	828	1888	3,573
1809	148	1862	788	1889	3,330
1810-1841	*	1863	740	1890	3,072
1842	555	1864	897	1891	2,791
1843	562	1865-1870	*	1892	3,261
1844	616	1871	1,163	1893	3,227
1845	678	1872	*	1894	4,089
1846	648	1873	1,083	1895	3,952
1847	551	1874	*	1896	4,086
1848	554	1875	983	1897	4,249
1849	512	1876	*	1898	2,673 +

*Figures not available

+Strikes affected the figure

All figures taken from Kelly's Directory of Newport, 1891

and Newport Directory, R.H. Johns, 1900

Appendix 12

Memorandum on Further Education in the County Borough of Newport by R.W. Holland

The Clauses of the Education Act, 1918 in so far as they relate to further Education will shortly come into operation, and the Local Education Authority will be called upon to make provision for the further education of all children between the ages of 14 and 16 years, and later between 16 and 18 years. These requirements will in part, no doubt be met by the provision of Junior Technical Schools, by the further provision of secondary accommodation and in part by the provision of Day Continuation Schools. Section 10 of the Education Act, 1918, lays down that subject to certain exceptions all young persons shall attend Continuation Schools at such times and on such days as the Local Education Authority may require for 320 hours in each year, distributed as regards times and seasons as may best suit the circumstances of each locality Day continuation education for young persons between the ages of 16 and 18 is postponed for a period of 7 years, and if the Local Education Authority choose during a like period the minimum time required for attendance at Day Continuation Schools may be reduced to 280 per year.

Section 10 of the Bill is not yet put into operation but as the Local Education Authority will be called upon for a comprehensive scheme for education in the County Borough it becomes immediately necessary to survey the position of continuation education. The duty of providing a scheme for Day Continuation Schools will fall naturally upon the Technical Institute Committee, which at present, exercises the functions of the Education Authority in relation to Evening Continuation Schools. In order that the scheme of education for the County Borough may be complete it is recommended that provision should be made for day continuation education up to the age of 18, and that the standard 320 hours per year should be adopted immediately the Clause comes into force. It is suggested that the Committee do not recommend that the temporary measure of a period of 280 hours per year shall apply to

Newport. The reduction would in no way benefit industry and commerce within the Committee's area since either 7 or 8 hours per week for 40 weeks in the year would entail the absence of the pupils from business on one whole day or two half days per week. On the other hand the loss to education would be 12½ per cent of the time allowed.

This preliminary Memorandum is intended to place before the Committee, on broad lines, the requirements of the Act, and to make certain suggestions with a view to carrying out the requirements.

SCHEMES

Before submitting schemes to the Board of Education a Local Education Authority is required to consider representations made to them by parents or other persons or bodies of persons interested and to adopt such measures to ascertain their views as they consider desirable, and the Authority is required by the Act to take such steps to give publicity to their proposals as they consider suitable or as the Board of Education may require. This Clause in the Act, coupled with the statement that the hours of further education in any year may be distributed as regards times and seasons as may best suit the circumstances of the locality, indicates the desire of the legislature that employers and work people in various industries should be consulted.

Further, in preparing schemes the Local Education Authority must have regard to any existing supply of efficient and suitable Schools or Colleges not provided by the Local Education Authority. This Clause, coupled with the administrative provisions of the Act in relation to Private Schools will have to receive careful consideration of the Committee as there are in certain Private Schools in the town pupils receiving an education, and the question will arise as to whether the education offered is suitable and efficient.

PROVISION REQUIRED

The number of children who attain the age of 14 in the County Borough in any year is approximately 1,500. Of this number 300 children of this age will doubtless be provided for in the Junior Technical and Secondary Schools of the town, but as the district grows very rapidly 1,500 may be taken as the basis.

Provision must therefore be made for 1,500 students in the first year at Continuation Classes, and for 3,000 during the second year, and this number will continue to the end of the 7th year. If the population of Newport remains approximately as at present provision will be required for 4,500 in the 8th year, and for 6,000 in the 9th year, after which the normal number will be 6,000 per annum, representing 1,500 pupils of each year of age 14 to 18. To accommodate 1,500 students for 320 hours per year it would be necessary to provide 300 places in Day Continuation Schools for the first year and 600 places for the second year, that is counting one day each week for every person for continuation education, and taking 5 schooldays, 300 places would be required for each day in the first year and an additional number for the second year. If an average class consists of from 25 to 30 students, the latter being considered a maximum, 12 teachers would be engaged at work at any given time. 12 teachers would, however, not be sufficient to carry out the work as such a number would entail each individual teacher teaching for 40 hours in the week not allowing for preparation of any kind. The staff should be appointed for full time duties but the actual teaching hours should not exceed 24, which means that at least 20 teachers would be required to complete the first years work, and an additional staff equal to 20 full time teachers in the second year.

CURRICULUM

During the first year and in some cases during the second year it is recommended that the scheme of continuation education adopted by the Committee shall be general. Vocational education should not be a strong feature of the earlier effort. 1,500 pupils would provide in all 60 classes and the division and classification would in part depend on the standard attained in the Elementary School and in part on vocation of the pupil for although vocational training as such would be a minor part of the first year's work yet something must be done to attain the loyalty and co-operation of the pupils themselves. This will be best achieved by classification in trades,

which process has the advantage of providing arrangements suitable to trades whilst it possesses the disadvantage of segregating school children into trade groups which is not ideal.

The instruction to be given in the continuation schools should provide for:-

(a) Instruction in English Language and Literature, and other general education

(b) Special instruction tending to produce efficiency in young persons in the employment in which they are engaged; and

(c) Instruction in Physical Exercises adapted to the age and physique of the pupils.

The ability to profit by vocational subjects under head (b) will be governed by standard attainment on admission and therefore whilst group by trade is adopted as a basis for classification grading will probably be based on ability and standard attained. A certain proportion of the children who leave the Elementary School are of over average ability and there are a certain number under average ability. Thus there are three grades to be provided for and these are not necessarily equally divided in all trades. If we consider that 60 per cent of the children leaving at 14 are able to complete the 7th standard by 14, 20 per cent more than complete this standard, and 20 per cent do not reach this point, we get approximately the number to be provided in each grade, and each grade will be subdivided into boys and girls:-

		Standard VII	450
	750 Boys	Above Standard VII	150
1500 Children		Below Standard VII	150
		Standard VII	450
	750 Girls	Above Standard VII	150
		Below Standard VII	150

Roughly speaking, in the first year six classes of boys and six classes

of girls would be expected in the lower grade, 18 classes of each in the middle grade, and six of each in the upper grade.

In a large town where the Education (Choice of Employment) Act has been in operation it would be possible to set a rough estimate of the trade grouping but statistics are not available in Newport and any attempt to make a statement would be more or less guess work.

STAFF

The Staff for the first year would be anything from 20 to 24 teachers, the former being the minimum. This number would be doubled in the second year, and would continue to be from 40 to 48 until the end of the 7th year (unless we have in the interim a voluntary extension to 18 years of age). In the 8th year a further 20, and a final 20 in the 9th year, making in all from 80 to 100 teachers. The salary of the teachers should be approximately that of the teachers in the Higher Elementary and Municipal Secondary Schools. They would be appointed for the full time work of the School so that their services might be available in any teaching session, but the teaching should in no case exceed 24 hours weekly.

The available source of supply is not sufficient to staff the new schools and many of the teachers will, no doubt, be men and women with trade, business and specialist knowledge. It will be necessary to institute some form of training for this class of teachers and a scheme for the training of continuation school teachers might well be offered by the Education Committee.

Cost of teachers during the first year would be hardly likely to attain a less figure than £4,000 to £4,500, whilst in the second year £8,200 to £9,200 would be required. Teaching staff expenditure alone will indicate to the Committee the magnitude of the problem before them.

BUILDINGS

The question of the provision of buildings is again a difficult matter. The present school accommodation is inadequate and there is nowhere to house the continuation schools.

The total number of places to be found for the complete scheme will be $\frac{6000}{5}$ = 1200. This entails the provision of several schools. No doubt the Technical Institute will accommodate a small proportion of the final years of the course, but should the Committee's complete scheme meet with a fraction of the success expected the accommodation at the Institute will be far from adequate for full time work in Technology.

This means that four schools, for 300 pupils each, complete with gymnasium, crafts room, etc., will be necessary, and two such schools will be required for the first year's working

PLAYING FIELDS

Physical exercise should be and is under the Act intended to be an important part of continuation work. It will be essential to provide playing fields for the use of the boys and girls, and indeed, at the present moment so far as the Technical Institute is concerned the matter is very pressing.

Of the eight hours per week devoted to education 60 or 90 minutes should be devoted to physical exercises and games in addition to any outdoor life voluntarily undertaken.

ADVISORY COMMITTEES

There is at present an Advisory Committee of employers and employees in the Engineering trade. It is suggested that this Committee be consulted and that other Committees, e.g. clerical, drapery and allied trades, distributive trades, etc., be set up for the purpose of obtaining co-operation and advice.

(Signed) R.W. HOLLAND

Appendix 13

Number of Students at the School of Science and Art

1873 - 1891

Year	Art	Science	Total
1873-74	25	60	85
1874-75	*	*	*
1875-76	53	60	113
1876-77	*	*	*
1877-78	*	*	*
1878-79	80	24	104
1879-80	96	20	116
1880-81	83	37	120
1881-82	106	20	126
1882-83	*	*	*
1883-84	*	*	*
1884-85	*	*	*
1885-86	*	*	*
1886-87	117	42	159
1887-88	113	53	166
1888-89	124	64	188
1889-90	152	95	247
1890-91	*	*	*

*Figures not traced

All figures taken from Committee minutes

Appendix 14

Number of Students at the Art School and Technical Institute 1891 - 1910

Year	Art School	Technical Institute	Total
1891-92	*	*	370
1892-93	*	*	*
1893-94	*	*	247(1
1894-95	*	*	*
1895-96	*	*	431
1896-97	*	*	463
1897-98	*	*	*
1898-99	199	452	651
1899-1900	131	380	511
1900-01	372 +	420	792
1901-02	287	462	749
1902-03	288	545	833
1903-04	274	528	802
1904-05	244	477	721
1905-06	195	446	641
1906-07	202	503	705
1907-08	210	545	755
1908-09	206	523	729
1909-10	210	538	748

* Figures not traced

+ This figure included a large number of under-age students

All information obtained from Committee minutes or Annual Reports

Appendix 15

Number of Students at Newport Technical College

1910 - 1933

Year	Art	Technical	Total
1910-11	305	813	1118
1911-12	255	643	898
1912-13	211	633	844
1913-14	239	781	1020
1914-15	184	670	854
1915-16	126	781	907
1916-17	95	868	963
1917-18	173	914	1087
1918-19			1142
1919-20			1762
1920-21			1333
1921-22			1094
1922-23			1120
1923-24			1001
1924-25			992
1925-26			900
1926-27			924
1927-28			991
1928-29			975
1929-30			1181
1930-31			1161
1931-32			1104
1932-33			1146

Only totals are given for 1918-1933

All information is taken from Committee minutes and Annual Reports.

Appendix 16

Number of Students at Newport Technical College

1933 - 1958

Academic Year	Department					Further Education Total	Total (including Junior Students)
	Pure / Applied Science	Engineering	Commerce	Building	Art/Craft		
1933-34						N.A.	1248
1934-35						N.A.	1349
1935-36						N.A.	1480
1936-37						N.A.	1521
1937-38						N.A.	1581
1938-39						N.A.	1597
1939-40	121	354	450*	247		1172	1415
1940-41	174	459	430*	315		1378	1611
1941-42	222	571	498	312		1603	1982
1942-43	252	593	463	254		1562	1977
1943-44	204	532	481	309		1526	1872
1944-45	234	598	500	458		1790	2145
1945-46	216	553	589	667		2025	2289
1946-47	259	643	596	327	502	2327	2710
1947-48	222	766	670	422	452	2532 (2578)	2864
1948-49	262	794	762	424	446	2688 (2912)	3184
1949-50	294	928	892	406	579	3099 (3263)	3515
1950-51	312	966	798	393	586	3055 (3209)	3449
1951-52	348	1075	949	407	613	3392	3646
1952-53	331	1228	985	405	475	3424 (3428)	3695
1953-54	335	1232	944	350	625	3486	3759
1954-55	349	1319	960	346	669	3643	3914
1955-56	401	1324	1053	408	658	3844 (3744)	4034
1956-57	384	1391	945	403	733	3856	4131
1957-58	419	1442	848	354	762	3825	4093

N.A.:- figures not available

*These figures were obtained by subtracting departmental totals from the corresponding Further Education Total, as the Commerce department figures for 1939-40, 1940-41 did not appear in the Principal's Reports.

All departmental totals are taken from Principal's Report's 1939 to 1958.

All grand totals are taken from various committee minutes.

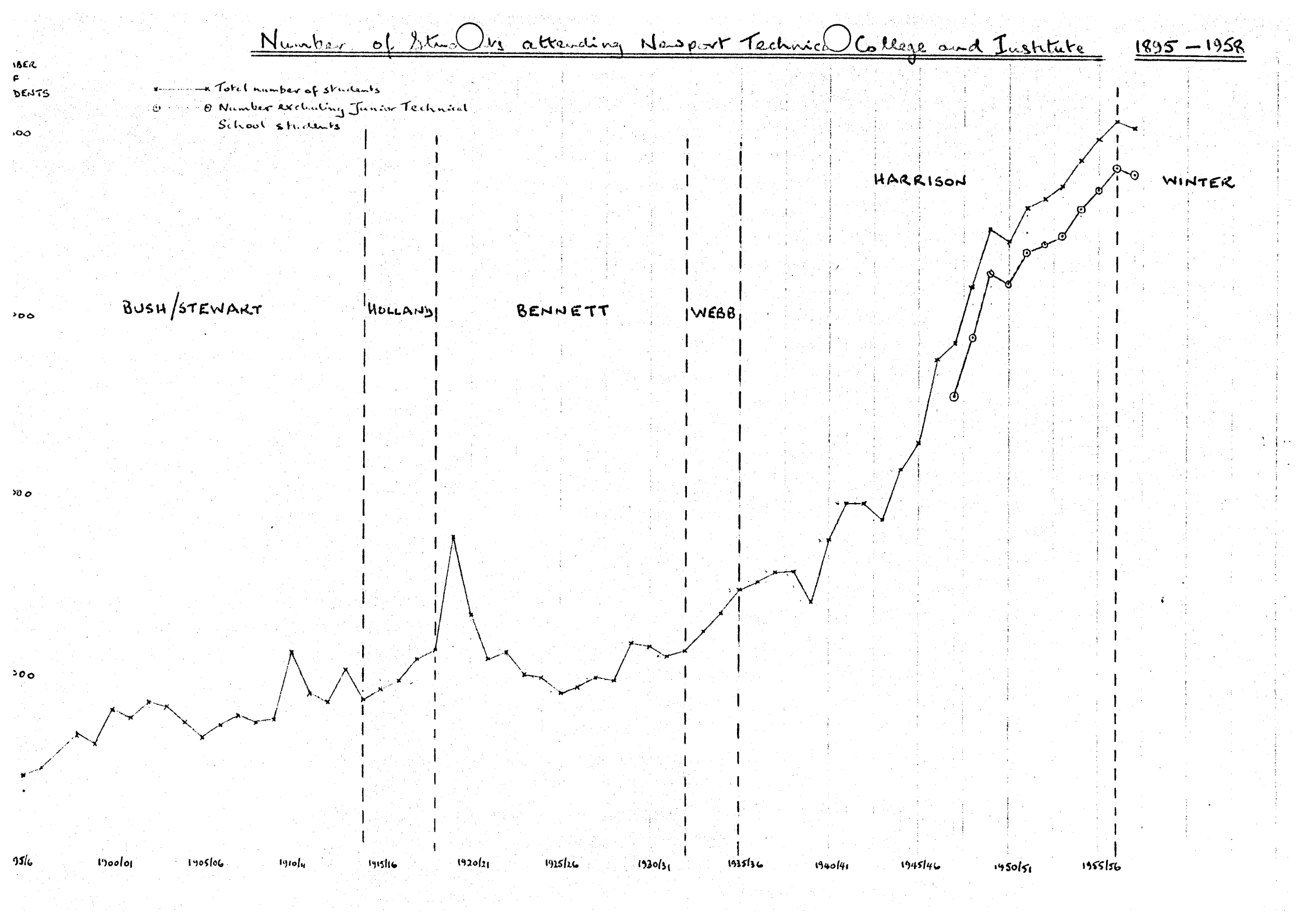
The totals in parenthesis are the figures given in the minutes, the corresponding unparenthesised figures are the sum of the departmental totals. The author has been unable to locate the causes of the discrepancies, but suspects that they are in the departmental figures.

The following three graphs illustrate the number of students at the college. The first shows total numbers from 1895/96 to 1957/58, emphasising the very rapid growth under the Principalship of F.W.R. Harrison.

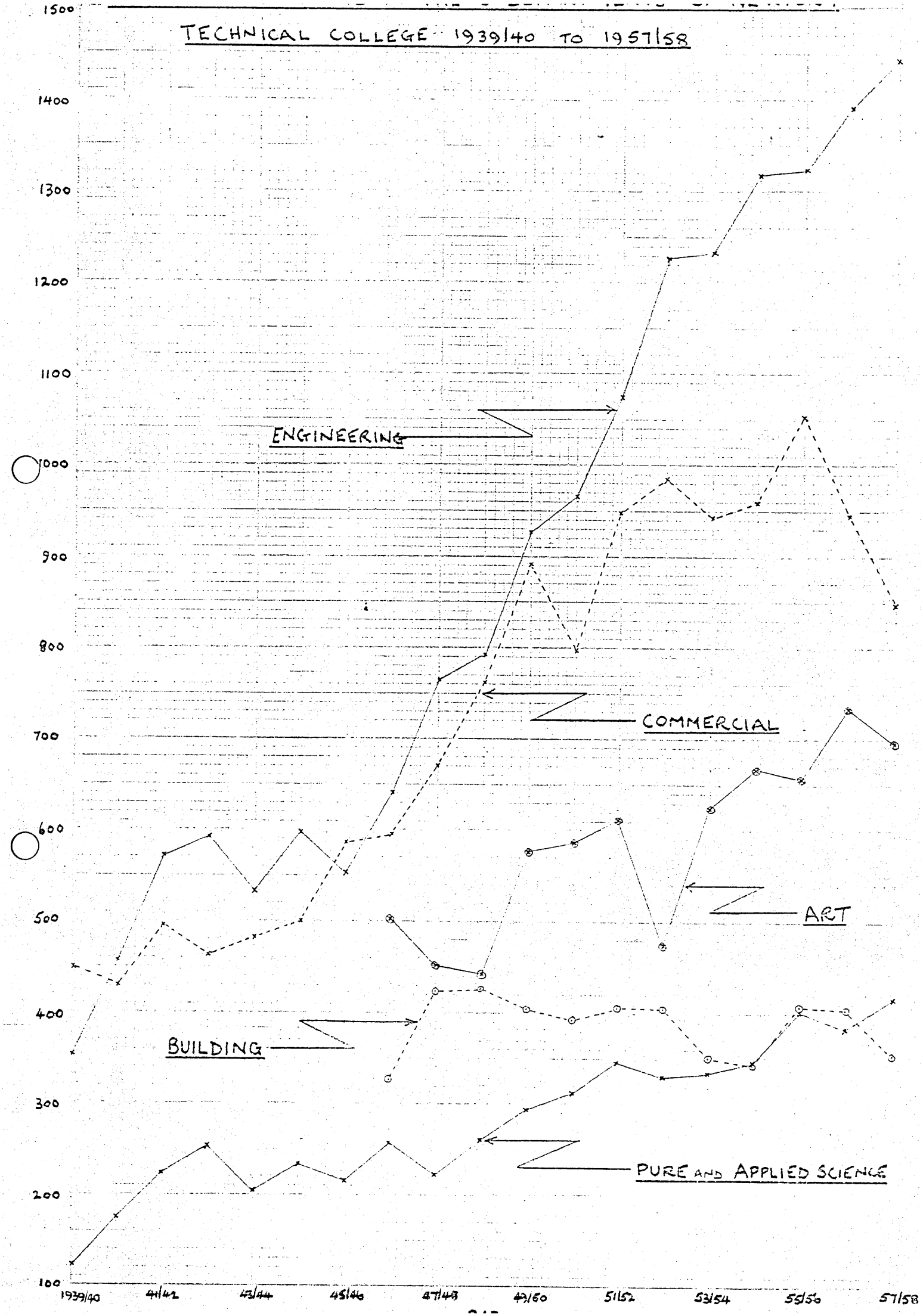
The second graph shows the departmental figures from 1939-40 to 1957-58.

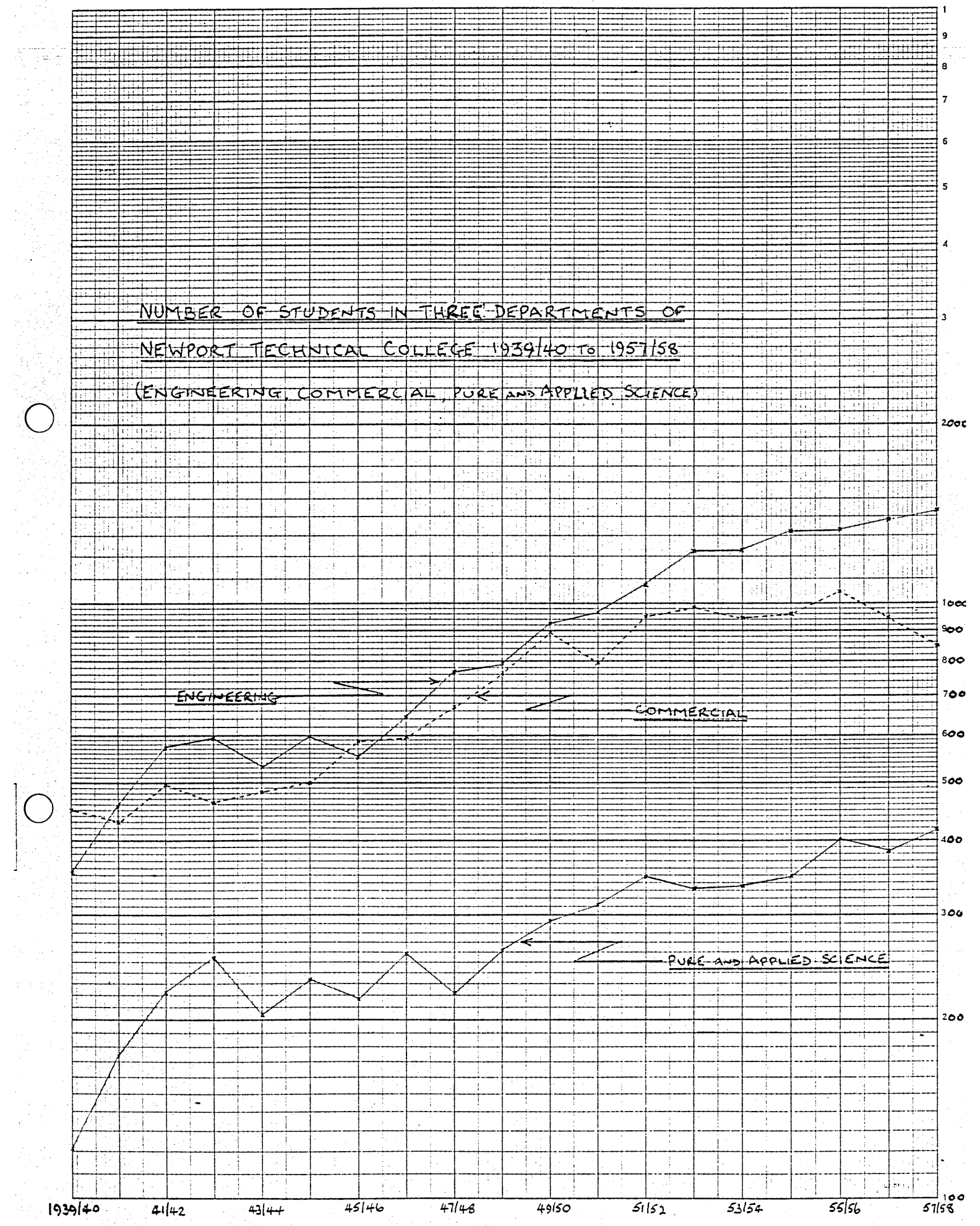
The third graph shows the departmental figures for the Engineering, Commercial and Pure and Applied Science departments plotted on semi-logarithmic graph paper, for 1939-40 to 1957-58. This graph emphasises that the Engineering and Science departments were growing at much the same rate over the period whereas the growth rate of the Commercial department was lower than these two departments from 1952-53 onwards.

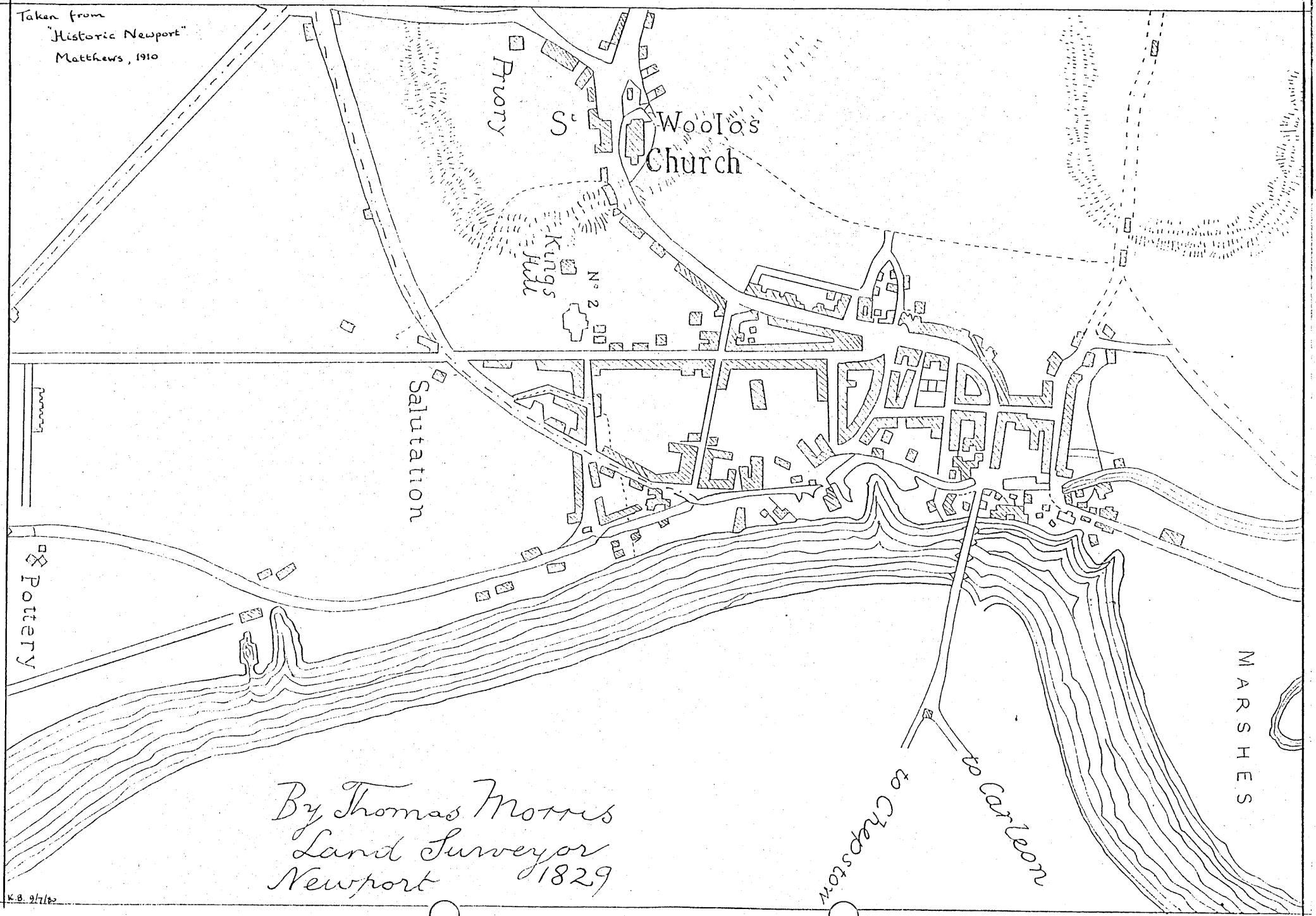
Number of Students attending Newport Technical College and Institute 1895 – 1958

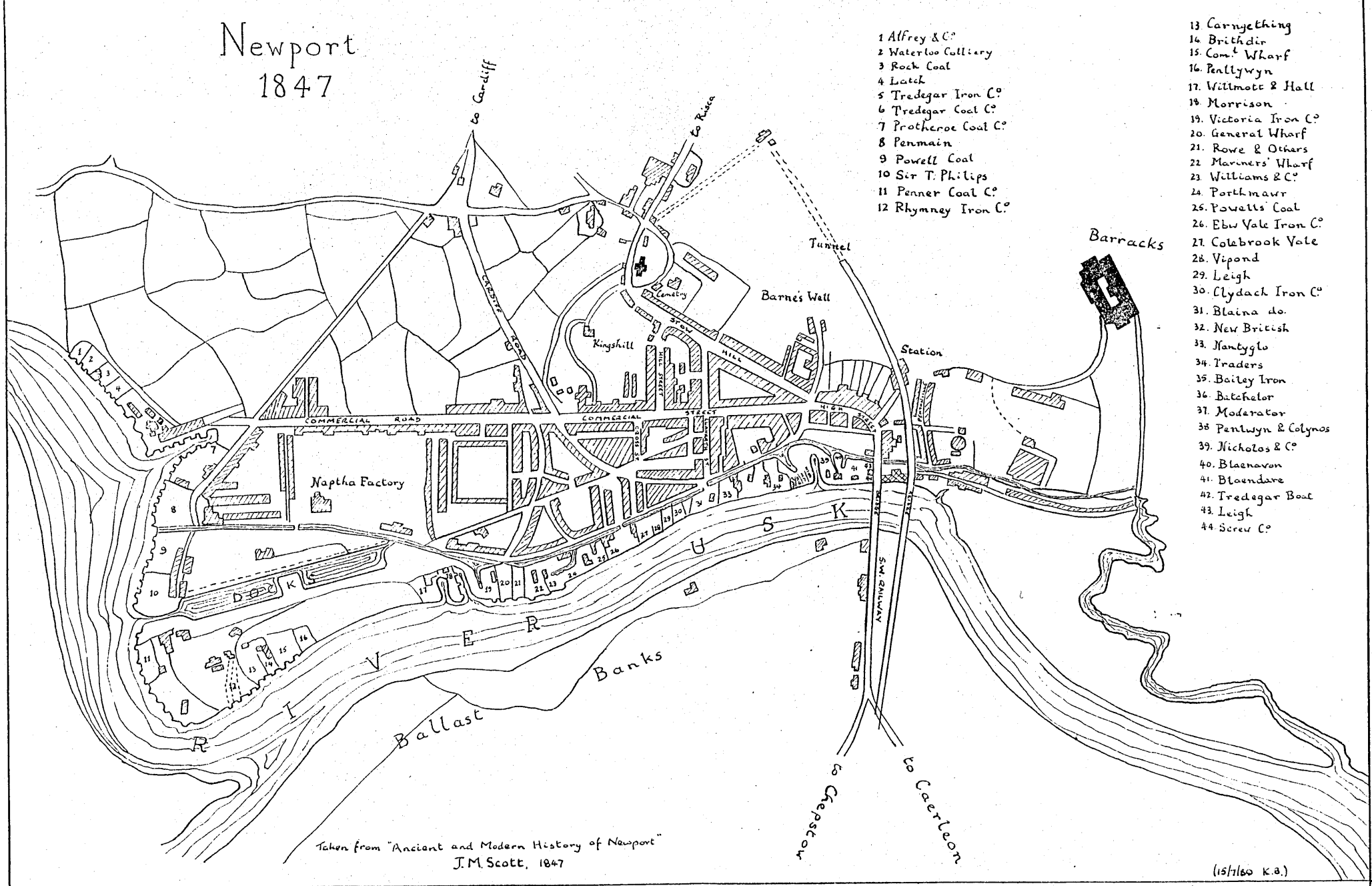


TECHNICAL COLLEGE 1939/40 TO 1957/58




NUMBER OF STUDENTS IN THREE DEPARTMENTS OF
NEWPORT TECHNICAL COLLEGE 1939/40 TO 1957/58
(ENGINEERING, COMMERCIAL, PURE AND APPLIED SCIENCE)
ENGINEERING
COMMERCIAL
PURE AND APPLIED SCIENCE
1939/40
41/42
43/44
45/46
47/48
49/50
51/52
53/54
55/56
57/58
100
200
300
400
500
600
700
800
900
1000


Taken from
"Historic Newport"
Matthews, 1910
Priory
St Woolos
Church
Kings hill
No 2
Salutation
Pottery
MARSHES
to Caerleon
to Chepstow
By Thomas Morris
Land Surveyor
Newport 1829
K.B. 9/7/80



Taken from "Anciant and Modern History of Newport"
J.M. Scott, 1847

(15/7/60 K.B.)

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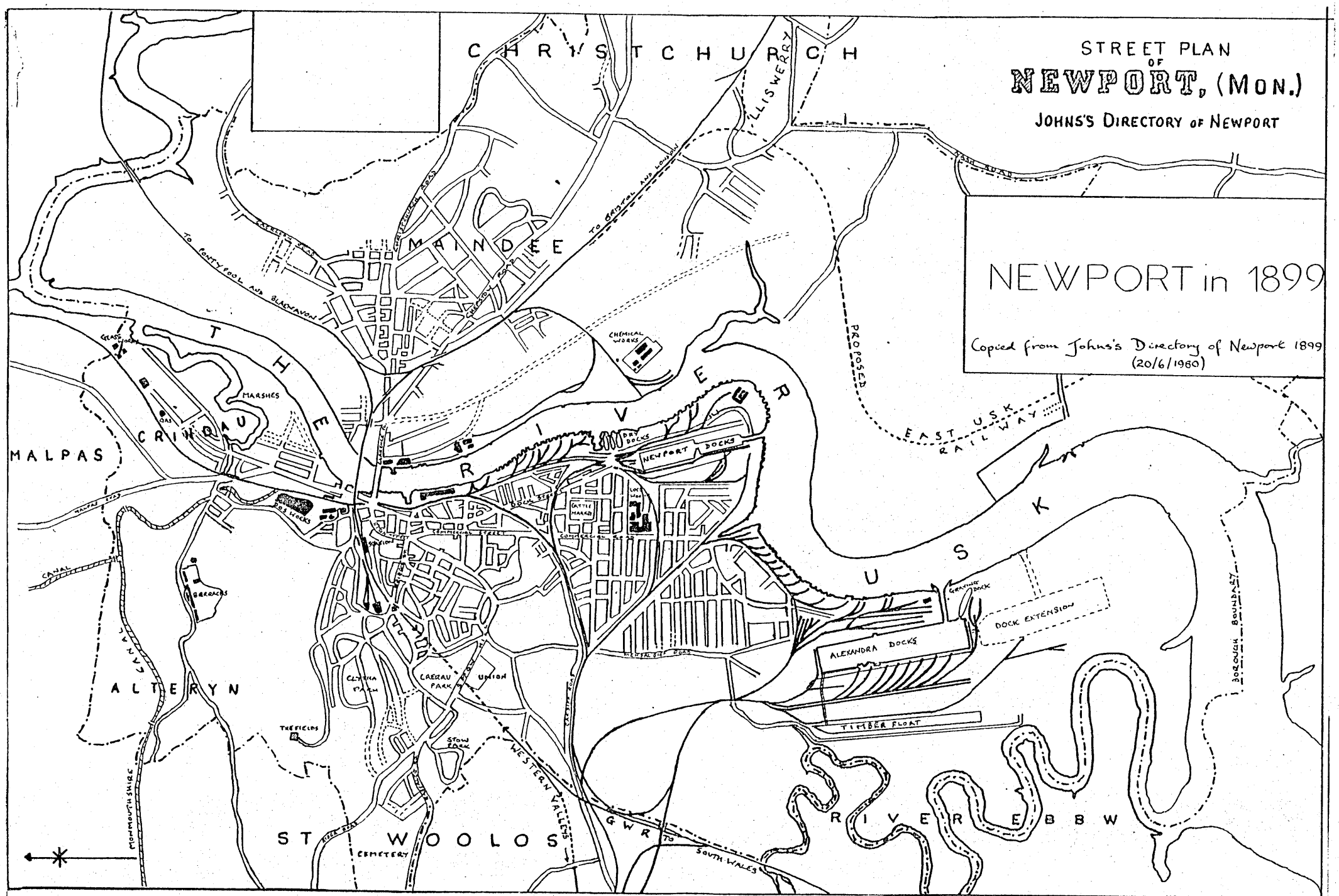
STREET PLAN
OF
NEWPORT, (MON.)
JOHNS'S DIRECTORY OF NEWPORT
NEWPORT in 1899
Copied from Johns's Directory of Newport 1899
(20/6/1960)
CHRISTCHURCH
LLISWERRY
MAINDEE
To Pontypool and Blaenavon
To Bristol and London
PROPOSED
EAST USK RAILWAY
THE CRINDAU
MARSHES
GLASS WORKS
GAS WORKS
CHEMICAL WORKS
MALPAS
RIVER USK
DRY DOCKS
NEWPORT DOCKS
CATTLE MARKET
GRANGE DOCK
DOCK EXTENSION
ALEXANDRA DOCKS
TIMBER FLOAT
BOROUGH BOUNDARY
CANAL
BARRACKS
ALTERYN
CAERAU PARK
UNION
CEMETERY
THE FIELDS
STOW PARK
WESTERN VALLEYS
GWR
SOUTH WALES
MONMOUTHSHIRE CANAL
ST WOOLOS
RIVER EBBW

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45. ibid p.77
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47. ibid p.84
48. 1971 Census
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50. ibid p.39
51. ibid p.127
52. ibid p.189

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3. Education in Industrial Wales, 1700 - 1900 p.174 Leslie Wynn Evans
4. A Short History of Modern Wales p.117 David Williams
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20. M.M. 17/ 7/41 p.3
21. M.M. 31/ 7/41 p.3
22. M.M. 30/10/41 p.2
23. M.M. 6/11/41 p.2
24. M.M. 13/11/41 p.2
25. M.M. 20/11/41 p.4
26. M.M. 1/ 1/42 p.3
27. M.M. 19/ 3/42 p.3
28. M.M. 7/ 5/42 p.3
29. M.M. 3/ 9/42 p.2

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32.	M.M.	26/11/42	p.2
33.	M.M.	25/ 2/43	p.4
34.	M.M.	5/11/42	p.3
35.	M.M.	22/ 4/43	p.3
36.	M.M.	15/ 7/43	p.2
37.	M.M.	2/ 3/44	p.3
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41.	M.M.	27/ 4/44	p.3
42.	M.M.	12/10/44	p.3
43.	M.M.	19/10/44	p.2
44.	M.M.	26/10/44	p.4
45.	M.M.	2/11/44	p.4
46.	M.M.	9/11/44	p.3, 4
47.	M.M.	23/11/44	p.4
48.	C.M.	25/10/44	
49.	C.M.	3/12/44	
50.	C.M.	21/ 4/45	
51.	C.M.	25/ 4/45	
52.	C.M.	5/11/45	
53.	C.M.	9/12/45	
54.	A.R.	1845/46	
55.	A.R.	1846/47	
56.	C.M.	15/ 1/47	
57.	A.R.	1847/48	
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59.	C.M.	5/ 9/48	

60. M.M.	24/ 2/49	p.3
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62. A.R.	1848/49	
63. C.M.	7/11/48	
64. C.M.	9/ 4/50	
65. C.M.	19/ 4/50	
66. C.M.	17/ 7/50	
67. M.M.	15/ 3/51	p.3
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69. M.M.	22/ 3/51	p.3
70. M.M.	1/ 3/51	p.3
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77. C.M.	17/ 6/51	
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81. M.M.	12/ 3/51	p.4
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111.	M.M.	26/ 4/62 p.3
112.	M.M.	25/ 4/63 p.3
113.	S.G.	2/ 5/63 p.5
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17. S.G. 13/ 9/73 p.8
18. C.M. 24/ 9/73
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49. C.M.	18/10/77	
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51. C.M.	2/ 7/80	
52. C.M.	27/ 9/81	
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54. C.M.	29/11/81	
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56. C.M.	22/ 1/86	
57. C.M.	26/ 7/87	
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65. C.M.	17/11/79	
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67. C.M.	5/12/79	
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80. M.M.	24/ 9/80	p.5
81. C.M.	1/10/80	
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84. C.M.	25/ 2/81	
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86. C.M.	27/ 9/81	
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89. C.M.	24/ 9/82	

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92.	C.M.	30/ 1/83	
93.	C.M.	20/ 7/83	
94.	C.M.	1/10/83	
95.	S.G.	21/12/83	p.3
96.	M.M.	10/ 3/82	p.5
97.	C.M.	29/11/82	
98.	S.G.	2/10/85	p.5
99.	S.G.	2/10/85	p.8
100.	S.G.	5/2/86	p.3
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102.	C.M.	25/11/84	
103.	C.M.	5/12/84	
104.	C.M.	31/ 7/85	
105.	C.M.	17/ 8/85	
106.	C.M.	26/ 1/86	
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116.	C.M.	25/ 9/88	
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2. S.G.	2/12/53	p.4
3. S.G.	20/ 1/54	p.4
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